ALBERTA AGRICULTURE'S ANNUAL REPORT 1984-85

TO HER HONOUR THE HONOURABLE HELEN HUNLEY
Lieutenant-Governor of the Province of Alberta

Madam:

I have the honor to submit the annual report of Alberta Agriculture for the fiscal year ended March 31, 1985.

I have the honor to be, Madam,

Your Obedient Servant,
LEROY FJORDBOTTEN
Minister of Agriculture

ALBERTA AGRICULTURE'S
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HONOURABLE LEROY FJORDBOTTEN
Minister of Agriculture

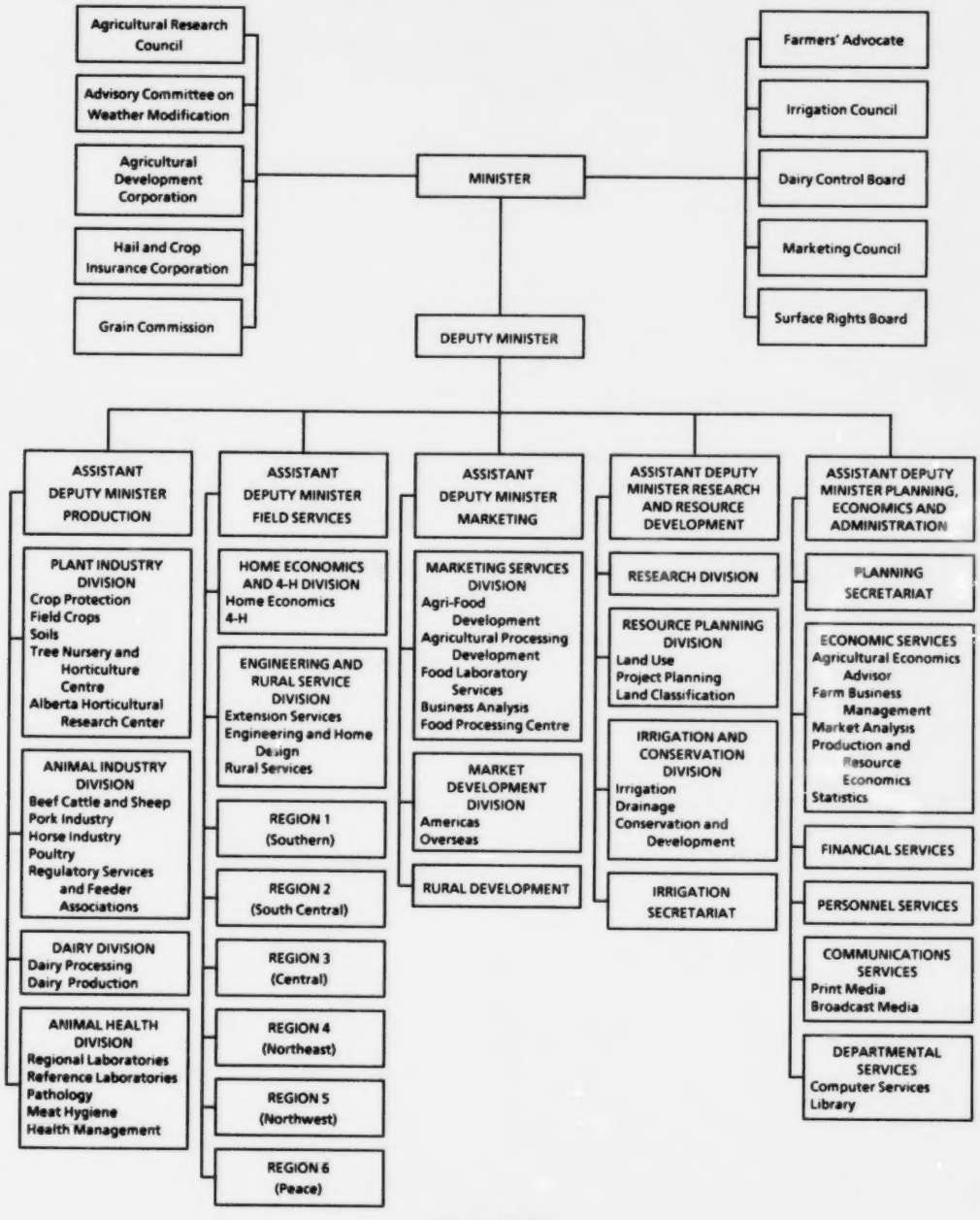
Sir:

I have the honor to submit the annual report of Alberta Agriculture for the fiscal year ended March 31, 1985.

Respectfully submitted,

H.B. McEwen
Deputy Minister

ORGANIZATIONAL CHART



March 31, 1985

HIGHLIGHTS

- The department received approval and commenced implementation of a comprehensive farm financial management program which includes individual counselling for farmers in financial difficulty and the development of intensive training courses to analyze and meet future farm business needs.
- A major survey of Alberta producers' views of the Western Grain Transportation Act showed overwhelming support for the "pay the producer" approach to distributing the "Crow Benefit".
- Policy positions with regard to the method of payment and other issues arising from the Western Grain Transportation Act, feed grain policy, grain and red meat stabilization were developed and submitted to appropriate federal ministers and agencies.
- Emphasis was placed on improved statistical analysis and reporting of Alberta agricultural imports and exports. Domestic and international trade issues continued to receive intensive analysis and monitoring.
- The Food Processing Development Centre in Leduc was officially opened December 6, 1984. The centre has a mandate to assist Alberta's food processors through application of new technology and development of new products and processes.
- Development of both domestic and international markets was emphasized. Export of Alberta agricultural products to the United States increased 42 per cent from 1983, increasing to $300 million from $211 million. About one-third of Alberta's commodities and over two-thirds of Alberta's processed food, feed and beverages were consumed in Canada.
- The Minister of Agriculture visited Japan, Korea and China in May 1984. A wide range of Alberta's agriculture and food products were promoted during his visit.
- The field crops branch developed a new semi-dwarf feed barley named Samson. This was the third variety developed by a 10-year program operating under the branch's research section.
- A livestock drought assistance program was implemented to provide assistance to cattle, sheep and goat producers in maintaining their breeding herds. The program, which was shared equally by the federal government, provided $27.2 million in assistance to 9,973 producers.
- Alberta was declared free of brucellosis during the year, marking an important milestone in the eradication of the disease in cattle. The province was also free of tuberculosis in cattle.
- Privatization of the dairy division's milk recording field services program was completed.
- The first permanent building to be constructed at the Alberta 4-H Centre, Battle Lake, was completed at a cost of $225,000.
- Financial and design assistance were provided to two new seed plants opened during the year.
- The announcement of a new five-year, $150 million commitment of the Alberta Heritage Savings Trust Fund to the irrigation rehabilitation and expansion program permitted planning to proceed for the 13 irrigation districts to continue to refurbish and enlarge their irrigation systems.
- Farming for the Future provided financial support totalling $4.6 million to 101 agricultural research projects and 102 on-farm demonstration projects.
- Major inventories of drainage and irrigable lands in Alberta were conducted for the Alberta Water Resources Commission. The agricultural land base study, involving Alberta Agriculture, Environment, Treasury, Municipal Affairs, and Energy and Natural Resources, proceeded toward developing a report in 1986.
- The Alberta weather modification research program completed the fourth year of its five-year mandate.

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WEATHER MODIFICATION

Alberta's current five-year weather modification research program completed its fourth year of operation in 1984-85. The program was supported by Alberta Agriculture and operated by the Alberta Research Council, with general direction from the weather modification advisory committee.

In 1984 the principal target of the Alberta hail project was an area of 48,000 km^2, centred on a radar site located at the Red Deer Industrial Airport. General hail suppression cloud seeding operations were conducted from June 21 until August 31 in the southern project area between Red Deer and Calgary.

As a result of lower than average hailstorm frequency during the project period, fewer operations were carried out than in previous years. Consequently, the quantity of data collected was lower than in previous years.

In total, hail was reported on 45 days in the project area during the hail season from June 1 to September 30. This represents a four per cent decrease in hail frequency from the average established between 1957 and 1984. One-third of the days during the seeding season had no significant storm development.

In 1984-85, INTERA Technologies of Calgary was again contracted to provide aircraft for the hail research and cloud seeding program. In total, six aircraft were employed: four operational seeders, one research seeder, and a cloud physics research aircraft.

The research aircraft, used to take detailed measurements inside storm clouds, has proven to be a significant breakthrough in data collection for weather modification research. In 1984, this aircraft flew 18 hail research missions. It also investigated 76 clouds for potential rainfall experiments on 19 days.

Another project undertaken in 1984 was a plume tracing study to determine the effectiveness of ground-based generator seeding. This work was conducted from July 10 to July 31 in the ground generator cloud seeding area south of Calgary.

During 1984-85, the weather modification advisory committee met monthly with representatives of the atmospheric sciences department of the Alberta Research Council to make recommendations concerning the weather modification program, and to monitor its progress. At the end of 1984-85, the findings of the program to date were being compiled for a final report that will be written at the end of the five-year mandate.

AGRICULTURAL DEVELOPMENT CORPORATION[1]

The Agricultural Development Corporation (ADC) was established by the Agricultural Development Act (1972) to provide financial assistance to farmers and agricultural processors in the province. Accumulated loan authorizations during the 13 years from June, 1972 to March 1985 amounted to 107,813 loans totalling $2,285,000,000. Of these numbers, 24,764 loans totalling $1,152,300,000 were active and outstanding at March 31, 1985.

During 1984-85 ADC continued to provide financial assistance to agricultural enterprises through direct loan financing on a long-term basis, and by means of extensive loan guarantee programs through other lenders to cover short and intermediate term financing. Direct farm lending during the year totalled $116.5 million compared with $149.7 million in 1983-84, and reflected the uncertain economic conditions which continued to prevail. Of the total direct farm loans authorized in 1984-85, loans made to beginning farmers amounted to $109 million, with the majority of these new entrants taking advantage of the staged option feature of the beginning farmer program. Other direct farm loans during the year amounted to $7.5 million, or about the same as the previous year. The 972 direct farm loans made in 1984-85 averaged just under $120,000, compared with an average of $128,000 for

[1]*Agricultural Development Corporation publishes a statutory annual report which provides more detailed information than that given in this section.*

loans made in the previous year. This reduction reflected the greater use being made of the staged option by beginning farmers.

In 1984-85 a total of $80.7 million in short and intermediate term credit was made available by other lenders under ADC's Alberta farm development loan guarantee program. Several changes to this program were introduced during the year to accommodate the needs of Alberta farmers. A further $6.4 million was approved for Alberta farmers as specific guarantees. Under these two guaranteed programs, loans were approved for more than 5,600 primary producers.

ADC approved $38 million in incentives during 1984-85. The great majority of these incentives represented interest reductions to beginning farmers, but also included were incentives paid to producers in specific sectors of primary agriculture. During the year ADC announced that interest reduction incentives would be extended to include the sixth and seventh years of the loan for those borrowers eligible.

ADC field staff were very active during the year providing advice and counselling services to farm clients. During 1984-85 a total of 55,660 field office interviews were conducted, and 4,917 farm visits made.

ADC continued to provide financial assistance to secondary processing and agricultural service businesses throughout the province. Total direct and guaranteed loans to agribusiness during the year amounted to $19.3 million. Increased emphasis was placed on agribusiness account monitoring and administration of existing loans.

The corporation's preferred interest rates remained unchanged during 1984-85. During the last quarter of the year, ADC announced a new enterprise counselling services program, together with a new farm development guarantee program. These new programs involved the counselling services of successful and respected farmers or other business persons throughout the province, to provide advice and assistance to farmers experiencing financial distress. The objective of these programs was to assist farmers in difficulty to develop plans to maintain the viability of their farms, and to make operating funds available.

ALBERTA HAIL AND CROP INSURANCE CORPORATION[1]

It was the objective of the Alberta Hail and Crop Insurance Corporation to provide farmers with the opportunity of protecting their crops against loss caused by natural hazards over which they have no control and by so doing provide financial stability to the individual farmer and the agricultural industry of the province.

In carrying out this objective the corporation offered two separate programs: all-risk crop insurance and hail insurance. It also administered the wildlife damage compensation program for public lands and wildlife.

Farmers insured more than two-thirds of the province's grain and oilseed acreage under the two insurance plans, and for the first time combined coverage exceeded one billion dollars. Indemnities paid for crop losses were well in excess of $200 million, mainly the result of extreme drought in southern and central regions of the province, heavier than normal hail damage, and the inability of many farmers to complete harvest before the onset of winter.

[1]*Alberta Hail and Crop Insurance Corporation publishes a statutory annual report which provides more detailed information than that given in this section.*

Hail Insurance

The hail insurance program, unlike the all-risk insurance program, has been entirely self-sustaining with premiums charged policyholders covering all administrative costs as well as indemnities. The corporation's policy has been to return earnings in excess of expenses and reserve requirements to policyholders in the form of premium refunds. Over the years, it has carried about two-thirds of all straight hail insurance taken out by Alberta farmers.

Notwithstanding extremely dry conditions prevailing over much of the province, hail insurance coverage in 1984 remained close to the record levels of the previous two years. Damage from hail was above normal in central and north-central regions of the province, resulting in a loss to premium ratio of 94.3 per cent, compared to the long-term ratio of 71.5 per cent. Because of the unfavorable experience, a premium refund was not paid for the first time in more than 25 years.

Following is a comparative summary of business and losses for the years 1984 and 1983.

SUMMARY OF HAIL INSURANCE PROGRAM

	1984	1983
Policies	9,848	10,531
Acres insured	3,388,000	3,690,000
Risk	$247,094,000	$259,190,000
Premium	$ 16,196,000	$ 15,953,000
Indemnities	$ 15,265,000	$ 11,407,000
Loss-to-premium ratio	94.3	71.5

The agreement under which the corporation provided hail insurance coverage on all cropped acreage in the Eastern Irrigation District was discontinued prior to the start of the 1984 season.

Crop Insurance

The Canada-Alberta program showed further growth in 1984 with both participation and coverage setting new records.

Crop insurance provided farmers with a production guarantee based on a percentage of long-term average yields. Where overall production from an insured crop of a policyholder fell below the guarantee because of damage caused by any of the natural perils, the corporation paid for the shortfall at a value selected by the insured prior to the start of the season.

Loss payments for production shortage reached record proportions as southern and south-central regions experienced the worst drought in many years. As well, hail caused more than normal damage and because of the early onset of winter many farmers in northern regions were unable to complete harvest in the fall. In the spring, a reseeding benefit was paid on a substantial acreage because of dry conditions in the south and soil crusting in the north. A severe grasshopper infestation in southern regions compounded the effects of the drought.

Policyholders were able to obtain spot-loss hail coverage under an endorsement to their crop insurance policy. Nearly 85 per cent of all policyholders availed themselves of this low-cost coverage.

Following is a statistical summary of experience for the past two years.

SUMMARY OF ALL-RISK INSURANCE PROGRAM

	1984	1983
Policies	21,938	20,050
Acres insured	9,302,000	8,289,000
Risk	$760,269,000	$663,634,000
Hail endorsement coverage	$666,563,000	$559,626,000
Premium*	$ 97,705,000	$ 87,332,000
Indemnities		
Basic policy	$166,242,000	$ 48,713,000
Hail endorsement	38,046,000	25,456,000
Total	$204,288,000	$ 74,169,000

* *Includes farmers' share, federal contribution and the provincial high risk subsidy.*

In 1984, insurance programs were developed for pedigreed alfalfa and creeping red fescue seed, and for pedigreed cereal and oilseed crops. Other crops covered included all the major cereal and oilseeds, as well as seed peas, dry beans, grain corn, potatoes, vegetable crops grown for processing and dehy alfalfa.

Hay and Pasture Insurance

The area in which the drought insurance for hay and pasture crops was offered was expanded in 1984 into a wider area in east-central and northeastern Alberta. The dry conditions throughout the spring and summer again resulted in an unfavorable loss experience.

Experience for the hay and pasture programs for the past two years has been as follows:

SUMMARY OF HAY AND PASTURE INSURANCE

	1984	1983
Number of policyholders	1,107	609
Coverage	$11,040,000	$5,805,000
Premium	$ 1,523,000	$ 755,000
Number of farmers paid	965	574
Total indemnities	$ 3,862,000	$1,718,100
Loss-to-premium ratio - %	253.5	227.5

Government Participation

The Canada-Alberta crop insurance program was administered by Alberta Hail and Crop Insurance Corporation, a crown corporation of the province of Alberta. Under the program, Canada paid one-half of total calculated premium, while Alberta paid all administrative costs and in addition paid a portion of the farmers' share of premium through a high-risk subsidy applicable to those areas and crops with above-average risk.

Honey Insurance

An insurance plan for honey was again offered. Since Canada did not participate in this program, the province of Alberta again paid one-half of the premiums as well as the administrative expenses. A total of 101 farmers carried $3,081,000 of protection and received indemnities of $257,000. Most of the losses were due to drought in southern regions of the province. Honey production in northern Alberta was above average.

ALBERTA GRAIN COMMISSION

The commission continued to provide its 1-800 toll-free grain price line. Several changes were made to the format of the broadcast to better reflect the needs of Alberta farmers. In addition, the commission up-dated its west coast traffic situation report and its reported feed grain prices review.

In the absence of a full time chairman, the acting chairman and the farmer members took an active role in the operation of the commission during the past fiscal year. They represented the commission at a number of industry meetings and provided input in a number of important areas.

As has been the case for the past number of years, issues surrounding the transportation of grain and problems associated with statutory freight rates continued to occupy a good deal of the commission's time.

During the period the commission has consistently attempted to play a liaison role with all segments of the industry. During 1984-85 the commission was vitally interested in proposed changes to the Canada Grain Act and provided input to the Canadian Grain Commission on the direction of these changes. The commission also took an active interest in a number of cases that are currently before the courts.

The commission had the opportunity to meet with a number of industry officials during the past year and to provide and receive input from them.

FARMERS' ADVOCATE OF ALBERTA[1]

The Farmers' Advocate of Alberta reviewed numerous inquiries of concern to the agricultural community. A comprehensive annual report issued by the Farmers' Advocate office is available through the Minister of Agriculture or directly from the Farmers' Advocate of Alberta.

ALBERTA DAIRY CONTROL BOARD

The dairy board, operating under The Dairy Board Act, met its responsibilities in the administration of fluid milk, industrial milk and cream sectors. These responsibilities included the licensing of dairy producers, processors and distributors of fluid products; setting and adjusting fluid milk quotas; regulating time and payment to producers; and in general governing the sale of milk in Alberta.

The board was responsible for the operation of the Alberta milk market sharing plan, an industrial milk plan entered into by federal and provincial authorities. The board was a member of the Canadian milk supply management committee, a body responsible for the development of the national dairy policy.

The number of active dairy producers - fluid milk, industrial milk and cream - as of March 31, 1985, totalled 2,876. Total provincial production was up by 3.54 per cent from the previous fiscal year. Fluid milk production increased by 4.22 per cent, industrial milk production increased by 7.25 per cent and cream production decreased by 11.16 per cent. Fluid milk sales decreased by 1.88 per cent from the previous year.

The board operated a fluid milk equalization pool for Alberta fluid milk producers. This plan successfully completed its tenth year of operation and enabled producers to share in the sale of fluid milk returns regardless of location or source of sales.

No additional producers were accepted under the graduated entry program. Twenty-eight producers received additional allotments of fluid quota under the graduated entry plan. A total of 930 industrial producers have entered the fluid sector since the start of the graduated entry program in 1975.

Producers' financial returns for fluid milk, industrial milk and farm separated cream advanced at intervals during the year. Fluid milk prices increased $0.98 per hectolitre April 1 and July 1, 1984 and March 1, 1985, ending the year at $50.09 per hectolitre. Industrial milk advanced $0.65 per hectolitre April 1, 1984; $0.82 per hectolitre August 1, 1984 ending the fiscal year at $37.03 per hectolitre. Churning cream prices also increased in April and August 1984 for total increases of 18 cents per kilogram of butterfat.

Board staff maintained an audit program of all fluid processors together with inspections to maintain and ensure compliance with regulations issued under the authority of The Alberta Dairy Board Act.

[1] *A more detailed and comprehensive annual report issued by the Farmers' Advocate's office is available through the Minister of Agriculture or directly from the Farmers' Advocate.*

SURFACE RIGHTS BOARD[1]

The Surface Rights Board, a quasi-judicial board established under The Surface Rights Act, granted operators the right to enter on and use the surface of land for mineral recovery operations and for the construction and operation of power transmission lines, pipelines and telephone lines, where the operator had been unable to acquire the necessary right by consent of the owner or occupant of that land; and held hearings, in those cases where a private agreement could not be reached, to determine the compensation payable by the operator and the person entitled to receive the compensation.

The board held hearings with respect to damage disputes and requests for review of annual compensation under board compensation orders and surface leases.

The board issued written decisions to the parties concerned as required by The Administrative Procedures Act in all cases where a hearing was held and a decision required. The board issued orders granting right of entry, terminating right of entry, fixing compensation, amending or varying compensation on reviews, and various incidental orders, and continued to assist in the recovery of money owed by an operator to any person under board orders or surface leases.

The Expropriation Act was administered by the board with respect to expropriation of land authorized under or pursuant to section 31 of The Water Resources Act and The Hydro and Electric Energy Act.

[1]*The Surface Rights Board presents a detailed annual report to the Minister of Agriculture each year.*

AGRICULTURAL PRODUCTS MARKETING COUNCIL

The council was responsible for the administration of The Marketing of Agricultural Products Act. Pursuant to the Act, the council facilitated the establishment and supervised the operation of producer marketing boards and commissions. Eight marketing boards and three commissions operated under the Act: Alberta Broiler Growers' Marketing Board, Alberta Cattle Commission, Alberta Egg and Fowl Marketing Board, Alberta Hatching Egg Marketing Board, Alberta Pork Producers' Marketing Board, Alberta Potato Commission, Alberta Sheep and Wool Commission, Alberta Sugar Beet Growers' Marketing Board, Alberta Turkey Growers' Marketing Board, Alberta Fresh Vegetable Marketing Board and Alberta Vegetable Growers' Marketing Board.

The role of Alberta's marketing boards and commissions became more prominent as producers increasingly viewed these organizations as a means of improving their economic well-being in light of current economic conditions.

The Alberta Broiler Growers' Marketing Board entered into an agreement with the Canadian Chicken Marketing Agency whereby Alberta chicken producers were committed to maintaining chicken production within specified limits for 1984 while not formally becoming a participant in the agency. The Canadian Chicken Marketing Agency, which has jurisdiction in the rest of Canada, sets provincial quota allocations for the other provinces.

The Alberta Cattle Commission continued to spend considerable amounts of time and effort in discussing and analyzing the pros and cons of a national red meat stabilization proposal.

Despite the efforts of the Alberta Egg and Fowl Marketing Board, the production of commercial eggs in Alberta continued to be restricted at levels significantly below market requirements owing to the inability of the

Canadian Egg Marketing Agency to develop an acceptable policy for the distribution of egg marketing quota among the provinces.

The Alberta Hatching Egg Marketing Board experienced a relatively stable year with a significant increase in flock productivity. The board also became heavily involved in discussing the merits of joining a national hatching egg marketing agency.

The Alberta Pork Producers' Marketing Board continued to function as a compulsory central selling agency in the marketing of hogs to processing plants.

Potato producers continued to review the establishment of a marketing board as a means of rectifying the industry's marketing problems. The Alberta Potato Commission carried on with its promotional and research activities on behalf of producers.

The Alberta Sheep and Wool Commission continued to direct its activities toward expanding the province's sheep industry.

The Alberta Sugar Beet Growers' Marketing Board, established in the fall of 1983, operated during 1984 without any statutory authority. Once delegated legislative authority, its main purpose will be to negotiate producer contracts and to establish a system of quotas.

Turkey production in Alberta continued to experience pressure as a result of restricted quotas set by the Canadian Turkey Marketing Agency. The Alberta Turkey Growers' Marketing Board participated in this agency which sets quotas for provincial turkey production.

As a result of an early winter last fall, vegetable growers experienced severe crop losses which placed considerable financial pressure on the Alberta Fresh Vegetable Marketing Board.

The Alberta Vegetable Growers' Marketing Board continued its efforts to expand the vegetable industry.

Council provided assistance to the Alberta Soft White Spring Wheat Growers' Association, the Alberta Canola Growers' Association, the Palliser Wheat Growers' Association, the Alberta Barley Growers' Association and a number of other commodity groups which were assessing the possibility of utilizing the marketing legislation.

A major aspect of the council's workload during the year was serving as arbiter for disputes within the industry. Council heard five appeals pertaining to the roaster quota policy of the Alberta Broiler Growers' Marketing Board and undertook another three appeals between a processor and the Alberta Pork Producers' Marketing Board.

Council continued to advise marketing boards and commissions under its supervision of their responsibility not only to producers but to other sectors of the industry and the public.

PLANNING, ECONOMICS AND ADMINISTRATION

The planning, economics and administration sector was organized and staffed to serve the following purposes:

- to provide effective and appropriate administrative and support services consistent with governmental and department policies to the Minister and departmental staff.
- to provide to the public a full range of economic and planning services that will contribute to a viable agricultural community.

Consistent with such purposes a number of specific objectives have been enunciated:

- to ensure the department's internal and external communication needs are effectively met in making the agricultural community better informed.
- to ensure the provision of a complete range of up-to-date applied agricultural economic services that will contribute to a viable agricultural industry.
- to provide co-ordination for applied agricultural economics in the department.
- to ensure the department effectively manages and controls revenue and expenditures in compliance with The Financial Administration Act.
- to provide effective personnel administration support services to assist the staff of Alberta Agriculture in achieving their objectives.
- to effectively meet the needs of the department for strategic planning, program planning, evaluation, policy analysis and policy development.
- to provide appropriate and timely service for space, telephones, vehicles, legislative and legal needs, records management, library and electronic data processing to the department in an economical way consistent with central agency guidelines.

PLANNING SECRETARIAT

Major activities of the Planning Secretariat during 1984-85 included analysis of grain related issues, regional analysis of the information needs of Alberta's farmers and analysis of credit and farm finance.

Grain transportation activities included a survey of Alberta producers' attitudes regarding the Western Grain Transportation Act, (WGTA) the development of Alberta's position on the WGTA, in particular the method of payment of the Crow Benefit, and submissions on grain transportation issues.

The functioning of the feed grain market was assessed. As a result, a set of criteria was designed for an Alberta feed grain policy with recommendations for the development of a new national feed grain policy.

Research and analysis regarding grain stabilization issues were conducted throughout 1984-85. To generate discussion and provide farm organizations with a means for evaluation, a set of guiding principles for grain stabilization was developed. The possibility of more closely integrating grain stabilization with crop insurance and cash advance programs was then assessed.

In addition, members of the secretariat were part of an interdepartmental team responsible for a canola industry marketing study.

Work continued on the analysis of information needs of our farm clients. This study provided planning and marketing possibilities for the department's program delivery. A follow-up project was designed to aid Alberta farm families in farm business management and home management/family relationships.

An important area of study was that of financial assistance programs for the farming community. In conjunction with the economic services division, criteria were developed and recommendations were made to meet the various financial concerns of farmers. The secretariat provided representation on a federal-provincial task force on farm finance where various

public initiatives were suggested to improve the cost and availability of credit for farmers.

The secretariat continued liaison between Alberta Agriculture and native agricultural development programs.

The secretariat provided various support administrative functions such as an inventory of the objectives, activities and outputs of the various divisions of Alberta Agriculture and an organizational analysis survey, conducted to provide staff with the means for effective management toward fulfillment of the department's objectives.

Detailed briefings addressing a variety of agricultural issues were prepared in support of departmental and ministerial requirements.

In addition, the secretariat provided input for a paper on agricultural issues prepared for the First Ministers' Conference and supplied technical support for the development of Alberta's initiatives on national tripartite red meat stabilization negotiations.

Acting as a resource for several committees, the secretariat was involved in research, planning, advising, evaluation, and task force and liaison work.

ECONOMIC SERVICES DIVISION

The economic services division placed increased emphasis on the financial management and taxation issues that farmers had to address during the last year. Financial management analysis, programming and consultative services were re-orientated to directly address the financial problems farmers faced. Proposed changes in the Income Tax Act were analysed for impact upon both the individual farmer and the developmental potential of the industry. In both cases, proposals were submitted which expressed the needs and opportunities of the agricultural industry in Alberta.

The division maintained applied economic services in commodity marketing and extension, production cost research, resource use research, and agricultural statistics. These services were provided to farmers, government departments and agencies, farm organizations and the private sector servicing the agricultural industry.

Agricultural Economics Advisor

International agriculture trade policy issues dominated activity for the year. The spate of various trade actions by foreign governments had a direct impact on Alberta's agriculture. These trade actions included retaliatory threats on a wide range of agriculture and food exports from Alberta into the European Community and indirectly potatoes into the United States, Western Grain Transportation Act-related trade actions and hog and pork exports. At the same time, the advisor was required to relate to a number of trade actions by the government of Canada against foreign imports, including beef and pasta products.

The advisor responded to action requests on various agriculture trade issues; prepared anticipatory memoranda and advised on various macro-economic issues, the federal budget, financial and policy measures of the federal government, agriculture development policy, market development issues and trade policy.

The advisor continued participation in the inter-departmental trade policy committee, the federal-provincial trade relations committee, and the federal-provincial agriculture trade policy committee. Reports on Canada-United States free trade and the General Agreements on Tariffs and Trade, committee work on trade in agriculture, and work in anticipation of a new round of trade negotiations were continuing activities. Briefing material for the assistant deputy ministers, the deputy minister, the Minister and the Premier for outgoing and incoming missions was prepared. Analysis and policy implications of developments in United States legislation - the United States Farm Bill - were

undertaken. The advisor participated in discussions with various trade and policy related official visits.

The advisor provided input into a variety of departmental programs, e.g., stabilization, credit and financing.

Farm Business Management Branch

The farm business management branch continued to develop and adapt farm management technology for use by farm families in making business decisions. To meet the increasing need for sound financial management under current economic conditions, the branch prepared the financial management initiatives proposal which received approval for a five-year term. The aim of the program is to assist Alberta farm families identify the strengths and weaknesses of their farm business operations as well as to help them develop alternatives to increase production and profitability.

The financial management consulting services, a subset of the financial management initiatives program, got a good start with 43 consultants, who counselled over 150 clients to the end of March. Programming of worksheets and course materials for the intensive management training were in progress.

Distribution of information was improved through *Agri-News* releases, back-up information for *Country Guide* articles, preparation of factsheets, *Country Guide* inserts and maintenance of over 110 publications.

The creation of a new section, management technology unit, recognized shifting priorities and the need to improve opportunities to apply electronic technology to farm business. As the records and analysis section was disbanded, responsibilities were merged with the financial management and farm planning sections. This provided an opportunity to integrate farm management accounting functions with related financial management programs and integrate analysis programs with farm planning activities.

The management technology section continued to publish the *Compu-Farm* monthly newsletter communicating the latest developments in farm computer technology to the farming public of Alberta (2,950 subscribers). The section's program included farm management techniques using computers as well as hands-on beginner training. The publication *How to Select Physical Record-Keeping Software for Your Farm Computer* was developed and evaluation of software for enterprise purposes provided market intelligence education. This section, jointly with engineering and rural services, continued to provide organizational support and actively participated at the Agro-Electronics Show in Vermilion.

The section re-programmed existing software and re-drafted the documentation. An average of 40 disks was copied monthly. The possibility of transferring distribution to a private agency was investigated.

The farm planning section continued development of machinery selection, replacement, financing and use strategies. The section prepared the *Leasing vs. Buying Farm Machinery* publication and the "Machinery Replacement" *Country Guide* insert. This section continued to develop expertise in dairy economics, maintained liaison with the dairy division and developed expertise in crop enterprises planning. Significant development work was required in preparing the format for the farm planning worksheets for use in the financial management initiatives program.

In a joint project with the statistics branch, the farm planning section increased the custom rate survey list from 2,000 to over 3,000 names of custom operators. Farm planning prepared and printed 9,000 copies of the second issue of the *Directory of Custom Operators in Alberta*, 8,000 copies of the *Custom Rates Annual Survey Summary* and 12,000 copies of *Farm Machinery Costs as a Guide to Custom Rates*.

The financial management section continued to review interpretation of tax legislation, providing comments and input into development of Alberta's position on current tax issues. It continued to maintain liaison with Revenue Canada, accountants and lawyers. It also provided information to aid farm managers in making sound decisions in credit, tax and labor management, business arrangements and estate planning. Over 30 tax and business arrangements seminars at district offices were held. The financial management section also prepared the Financial Fitness package consisting of four factsheets, two worksheets and loan detail cards to support the financial management initiatives program. Over 5,500 packages were distributed.

The branch once again organized the Agricultural Workshop for Lenders in co-operation with Olds College and lenders' agricultural departments (68 attended this five-day event). This workshop

familiarized agricultural credit institution personnel with current farming trends and techniques including production and financial parameters.

Two updates printed, totalling 25,000 copies, of *Assistance Available for Alberta Farmers* and *Sources of Credit Available in Alberta*, provided information to farmers, department staff and agri-businesses on credit sources and financial assistance programs in Alberta. Upon release, 3,600 copies of each publication were mailed in July and January. A high demand continued throughout the year.

A new publication called *Crop Insurance - What is it? Should I Buy It?* was released to improve the understanding of risk management strategies.

Over 10,000 financial record books, *Income and Expense Basic Records for Alberta Farmers* and *Prairie Provinces Farm Account Book*, were distributed.

The eighth Managing Agricultural Technology for Profit conference was held for the first time at Chateau Lake Louise with 330 participants. The conference received excellent ratings.

Market Analysis Branch

The objective of the market analysis branch was to provide farmers and other members of the agricultural sector with timely and pertinent market-related information on which to base production and marketing decisions.

The branch continued to monitor and analyze agricultural commodity and product markets. The information gathered provided the branch with data with which to prepare market situation and outlook reports, to interpret policy and other developments related to agricultural markets, to offer marketing extension courses and to provide market news and information.

The branch prepared comprehensive reports on market prospects for the major farm commodities produced in the province. The information was made available to over 4,000 farmers, members of the legislature, and others through the *Market Situation and Outlook* reports. Increased emphasis was placed on distributing market analysis and outlooks through commodity association newsletters such as the *Canola Digest*, *The Western Barley Grower*, *The Alberta Cattlemen*, *Forage Seed Notes*, and *NuKrop News*. Specific situation and outlook reports were prepared at the request of both in-house and outside clients.

The branch continued its extension program which gives farmers a more thorough understanding of the functioning of the market and provides them with market information on which to base business decisions.

The branch worked closely with field services staff and farm organizations with the aim of getting the extension program to a larger audience than could be reached by branch staff alone. Two outlook conferences were staged: Taking Stock at Edmonton in November 1984 provided farmers with market prospects for livestock, while Accent '85 at Lethbridge in March 1985 provided farmers with market outlook information on which to base their seeding decisions.

The branch also disseminated market news and short-term analysis through the *Weekly Livestock Market Review* and *The Weekly Market Grains and Oilseeds Review*. These were mailed to about 9,000 producers and industry clients and distributed electronically through GRASSROOTS and internally through the department's 5520 system. The *Monthly Livestock Slaughter Summary* and the weekly livestock and grain market chart service were published to supplement the regular market news publications of the branch. A computerized agricultural market data base, AGDATA, was maintained to facilitate internal research activities and for public use. The branch also worked closely with the Alberta Cattle Commission on its program for the collection and dissemination of cattle market news.

Statistics Branch

The statistics branch provided agricultural statistical information services to Alberta's farmers, agricultural industry, farm organizations, agribusiness and government.

Staff members maintained liaison with the agriculture division of Statistics Canada, Agriculture Canada, farm and business organizations and other government departments. The branch completed several surveys but only when other sources were nonexistent or inadequate.

One of the main publications prepared by the branch was the *Annual Statistics Yearbook* released in August. This document contained a summary of agricultural

data for the previous year. It was supplemented throughout the year by releases on current agricultural statistics.

Each quarter an update of *Farm Cash Receipts and Expenses for Alberta Farmers* was prepared and released. The report provided text and data on the Alberta farm income situation and outlook for the following year.

A regular crop report was released every two weeks from May to October with a year-end summary published in December. A quarterly forage report supplemented the crop report.

An annual survey of beekeepers was conducted. It estimated the number of beekeepers, number of colonies, average yield and total production of honey in Alberta. Branch staff also conducted a survey of vegetable and potato producers to obtain acreage and production data. In addition, a sheep survey which obtained information on production and marketing intentions of Alberta sheep producers was undertaken.

A one-page factsheet presenting major provincial agricultural statistics was issued.

The branch continued its involvement in price collection and reporting by releasing three reports: weekly average retail food prices for Edmonton and Calgary; weekly producer, wholesale and retail food prices; and monthly average farm input prices in Alberta.

The branch continued to improve available data and information on agricultural imports coming into Alberta and agricultural exports leaving the province. An extensive report was prepared and released.

The branch continued to document information on agricultural products after they leave the farm gate. Products studied were milk, bread, pork and beef. Reports titled *Market Margins* were released.

Branch staff conducted a specialty crop survey to obtain additional information on acreage and yields of specialty crops in Alberta. Summaries of the results were sent to producers who co-operated with the survey.

Custom rate data and information continued to be in demand and to meet this requirement branch staff contacted and obtained data from many producers across the province.

Production & Resource Economics Branch

The production and resource economics branch continued its research effort to develop a detailed data base on the economics of crop and livestock production, and the economics of resource development and use for agricultural production. The production section concentrated on providing farm clients with farming information to help improve the economic efficiency of their farms, while the resource section directed much of its effort towards the economic analysis of the interdepartmental Agricultural Land Base Study (ALBS).

Work began on the financial analysis of the various economic options in the ALBS. This analysis will indicate which improvement options are financially feasible to the farmers and where additional incentives may be necessary to encourage farmers to proceed with the improvements.

The production section initiated a major study of the economics of cow-calf production in Alberta. Roughly 260 cow-calf producers have agreed to participate in the study. Producers were stratified by region and size, then randomly selected. The study will cover three production years with a report prepared for each year.

A cow-calf case study was also initiated in co-operation with regions 4 and 5. The main objective of this study was to determine the costs and returns of more intensive cow-calf operations and to monitor performance over several production cycles. Sixteen cow-calf producers in Barrhead and 25 in Vermilion have provided 1984 data for this study.

Through its fluid milk pricing formula, the section monitored fluid milk production costs and supplied the Public Utilities Board with regular monthly reports on fluid milk production costs. As a result of the formula price, the producer price was increased from $47.15 per hectolitre to $49.11 per hectolitre in 1984 to reflect an estimated five per cent increase in production cost. However, as a result of relatively stable annual input prices and improved herd productivity, the annual dairy cost study has shown that instead of an increase, the 1984 fluid milk cost declined marginally (1.5 per cent). In effect, average producer returns to equity rose from 10.0 per cent in 1983 to 12.9 per cent in 1984.

The section continued to monitor the performance of sheep and hog producers in the province. Sheep producers continued to experience difficulties in 1983. Although production cost was down 12.2 per cent from 1982, producers still showed negative returns over variable costs of $22.87 per ewe and estimated losses of $39.90 per ewe. High management producers had returns over variable costs of $10.53 per ewe and estimated losses of 22 cents per ewe. Tentative results for 1984 showed a slight improvement to high management producers with returns to equity averaging $2.33 per ewe or 0.3 per cent.

Average production cost for high management farrow-finish producers fell 16 per cent to $54.82 per hundredweight of dressed pork produced in 1983. Although the price for market hogs was also down, average return to equity remained positive at $16.40 per hundredweight of dressed pork produced compared to $25.24 in the previous year.

Farrow-wean hog producers continued to experience economic difficulties in 1983. Losses were estimated at $126.14 per sow compared to $117.94 in 1982. Farrow-wean producers who marketed over 2,000 weaners in 1983 showed profits of $134.05 per sow.

At the request of the Alberta Egg Producers' Marketing Board and the Alberta Turkey Marketing Board, two studies were conducted to determine the economics of egg and turkey production in 1983. Eggs in Alberta are priced by Canadian Egg Marketing Agency (CEMA) using estimates of national production costs. On average, egg producers received returns over variable costs of 13.65 cents per dozen eggs and return to equity of 3.8 cents per dozen eggs. However, because of higher Alberta costs, producers needed an additional 3.5 cents per dozen eggs if they were to reach CEMA's target return to equity of 12 per cent. High management egg producers who comprised one-quarter of the study showed returns to equity of 11.5 cents per bird or 20.75 per cent.

Thirty per cent of the heavy turkey producers and 50 per cent of the light turkey producers in Alberta participated in a 1983 cost of production study. On average, heavy turkey producers reported production costs of $1.33 per kilogram sold and return to equity of 9.11 cents per kilogram sold or 11.93 per cent. High management producers showed returns to equity of almost 17 cents per kilogram or 38.1 per cent. In the case of light turkey production, the producer cost was $1.31 per kilogram sold in 1983 and the return to equity or profit was 10.08 cents per kilogram or 9.66 per cent.

Gross returns for sugar beets fell by 15 per cent in 1983 compared to 1981. Total production cost also fell by three per cent, but the drop was not great enough to prevent losses. Indeed, a three-year study just completed showed that growers experienced increasing losses in each of the three years studied, 1981, 1982 and 1983. The 1983 losses of $173 per acre were almost three times as great as those of 1981.

A crop case study was undertaken to determine the 1984 crop production costs and returns in all six regions, and to provide participants and field staff with this information in sufficient time to assist farmers in planning their field activities. One hundred and thirty farmers participated in this study. On balance, 1984 crop production cost was up about three per cent over 1983.

The branch continued to publish a quarterly newsletter, *Agriculture Transportation*, which contained transportation costs, policy developments and freight rate changes which affect agricultural commodities shipped by rail, road, air and water. There were also two *Grain Handling and Marketing* newsletters. Statutory rates on export shipments of grain and grain products were increased 34.6 per cent on August 1, 1984; rail rates on live cattle and meat were raised by five per cent in 1984.

A joint study with the Alberta Wheat Pool was started to determine farm trucking costs for hauling grain and grain delivery patterns. A report on the use of three-axle trucks for hauling agricultural produce was prepared for sugar beet and potato growers in southern Alberta. This latter report was done in response to grower interest in using three-axle trucks to haul produce. The report suggested alternatives for reducing or minimizing costs.

The branch completed a first draft of a report on the impact of the reform of the statutory freight rates on moving grain by truck. This project is interdepartmental and involves Alberta Economic Development and Alberta Transportation.

The resource section continued research associated with the Agricultural Land Base Study (ALBS). An interim report on the economic analysis of the direct benefits and costs for the nine alternative agricultural improvement options was submitted to the interdepartmental steering committee in the fall of 1984. Three papers were presented at the 1984 Canadian Society of Soil Science Conference in Banff. The topics were range improvement, summerfallow reduction and reclamation of dryland saline lands.

A report on the economics of drainage in Alberta was published. The results were presented at the third annual Western Premiers' Conference on soil and water management in Winnipeg. The results indicated that in almost all cases examined, it paid the producer to install surface or sub-surface drainage under dryland non-saline conditions. Under saline conditions however, the results were less favorable for dryland than for irrigated conditions. A water quality report, *Usability of Slough Water*, was also completed in co-operation with the engineering branch.

At the end of the fiscal year, major studies being undertaken by the resource section were the economics of erosion (in conjunction with Agriculture Canada) and economic/financial analysis of on-farm salinity control (in co-operation with the field services region 1 and the irrigation and conservation division, Lethbridge). More minor studies included a review of water pricing policies, aspen/straw fungal treatment study for Alberta Environmental Council, and preparation of a farm management services program proposal for a federal-provincial ERDA (economic regional development agreement).

Quarterly reports on farm real estate values and the 13th annual real estate report were published and distributed. Many requests were received for real estate information. Overall, the average value of agricultural real estate fell by 3.7 per cent in 1984 compared to a drop of 5.6 per cent in 1983.

Considerable time and effort was put into responding to questions from the Alberta Water Resources Commission regarding the South Saskatchewan River Basin hearings. Detailed comments were also prepared on the recommendations of the Environmental Council of Alberta on Maintaining and Expanding the Agricultural Land Base.

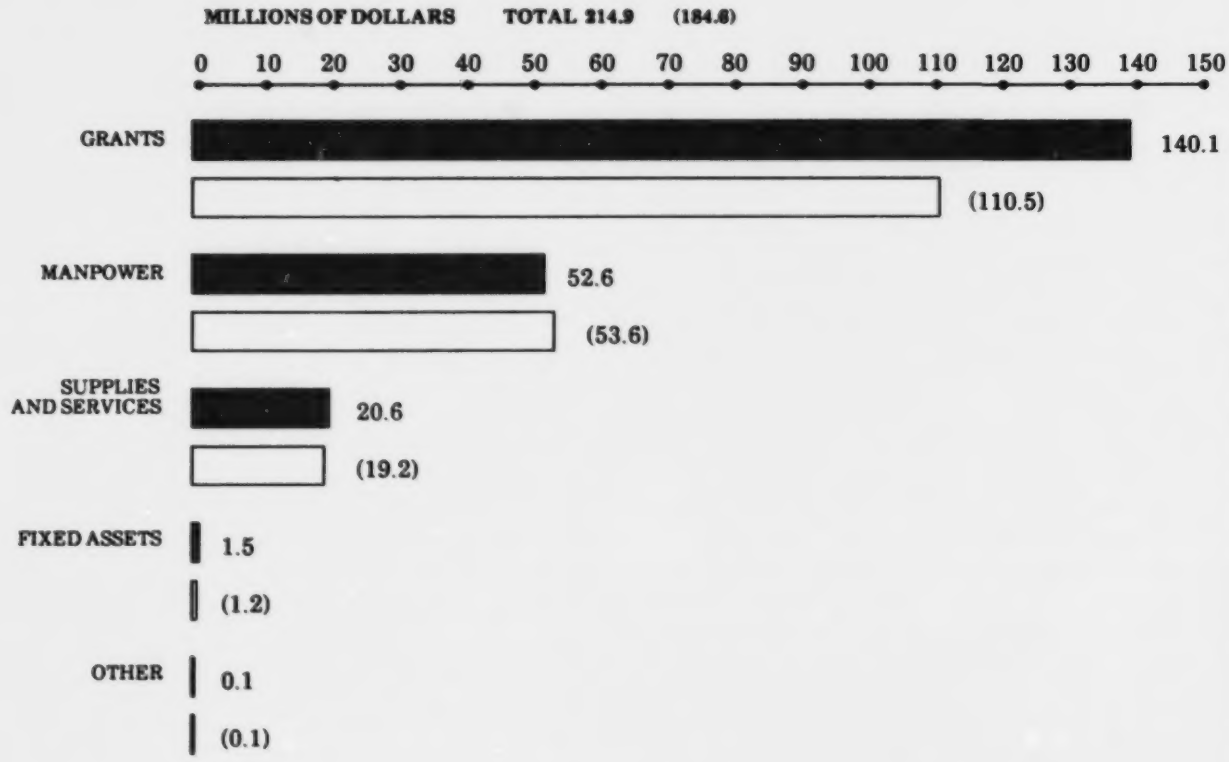
External reports and proposals reviewed included *The Economic Impact of Irrigation* prepared for the Alberta Irrigation Producers' Association; *Land Values for Forestry in Northern Alberta* (Alberta Energy and Natural Resources); *Proposal for Change in the Salinity Program*; *Economic Evaluation of Buffalo Bay Horse Lakes Proposal* (Alberta Environment); *Big Bend Financial, Income and Employment Analysis* and *Frost Hills Economic Assessment* (Alberta Energy and Natural Resources).

FINANCIAL SERVICES

Financial services was responsible for:

- — the processing for payment of all expenditures incurred by the department
- — the collecting and depositing of all departmental revenue
- — the budgeting and other financial matters relating to the department
- — the operation of the departmental mailroom
- — the purchasing of all materials, supplies and equipment for the department
- — the processing of the department's payroll
- — the inventory control of the department

TABLE OF EXPENDITURES CONTROL GROUPS 1984-85 UNAUDITED AND (1983-84)*



* Figures in brackets are for 1983-84

ALBERTA AGRICULTURE EXPENDITURES 1975-85

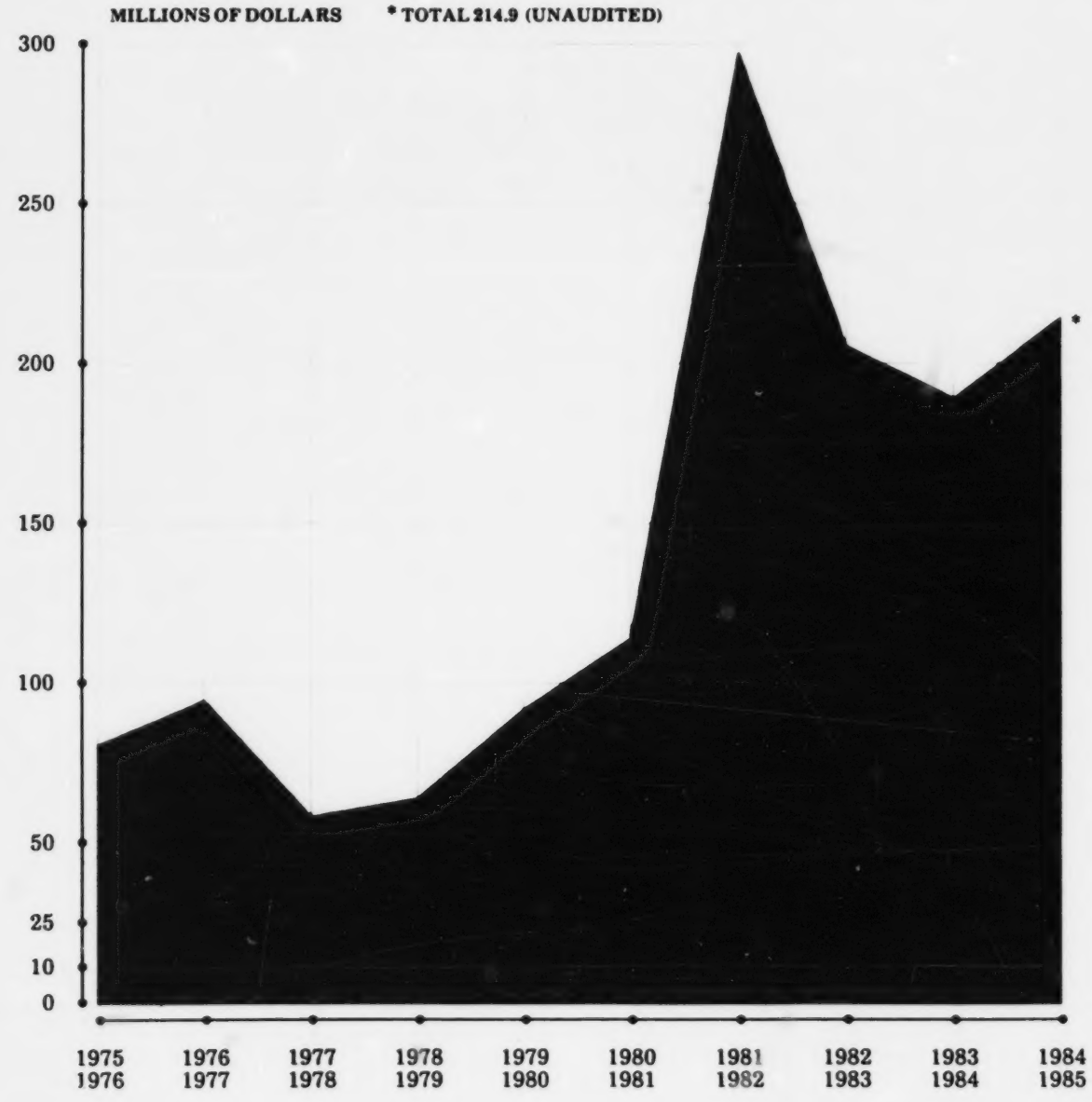
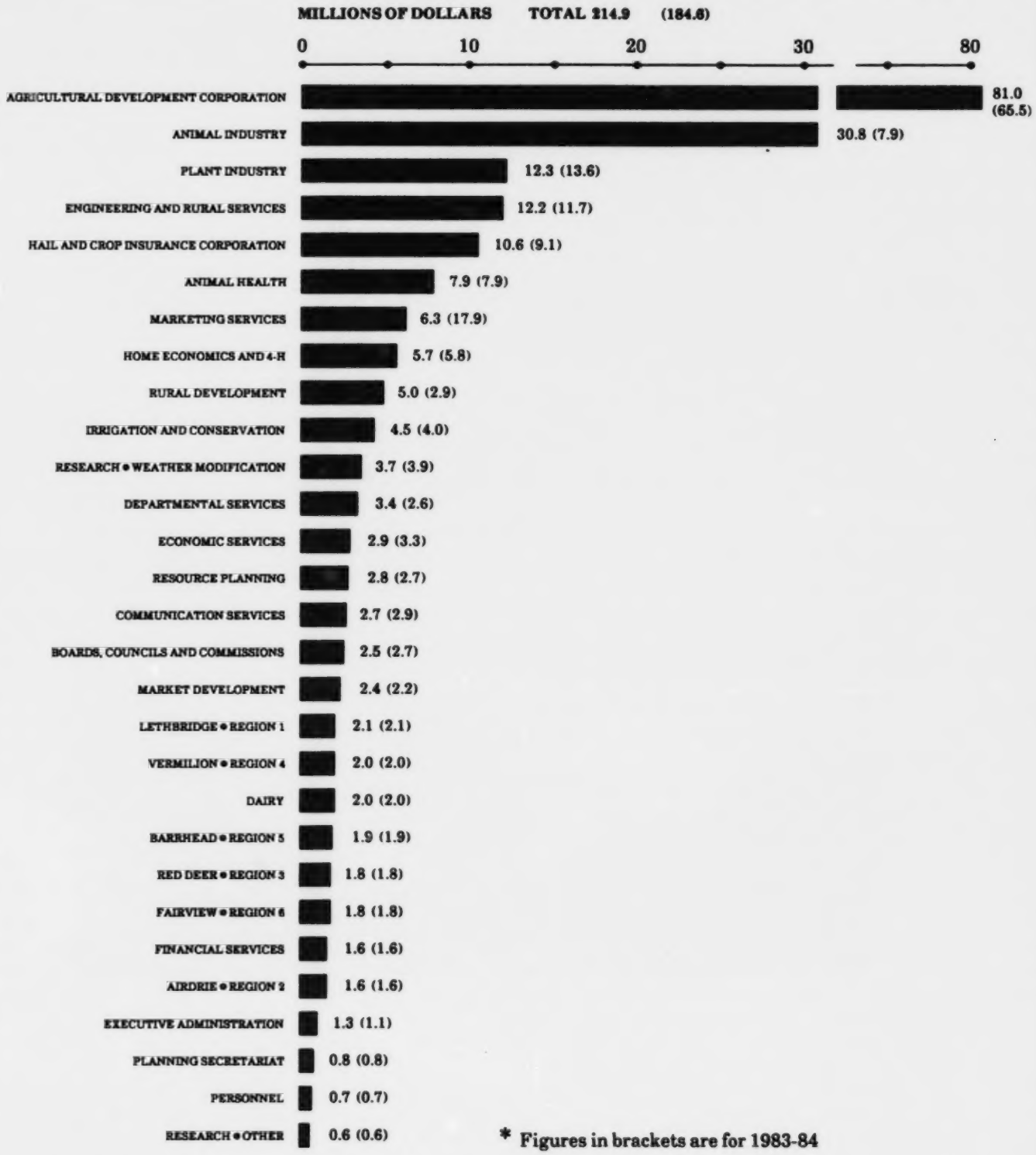
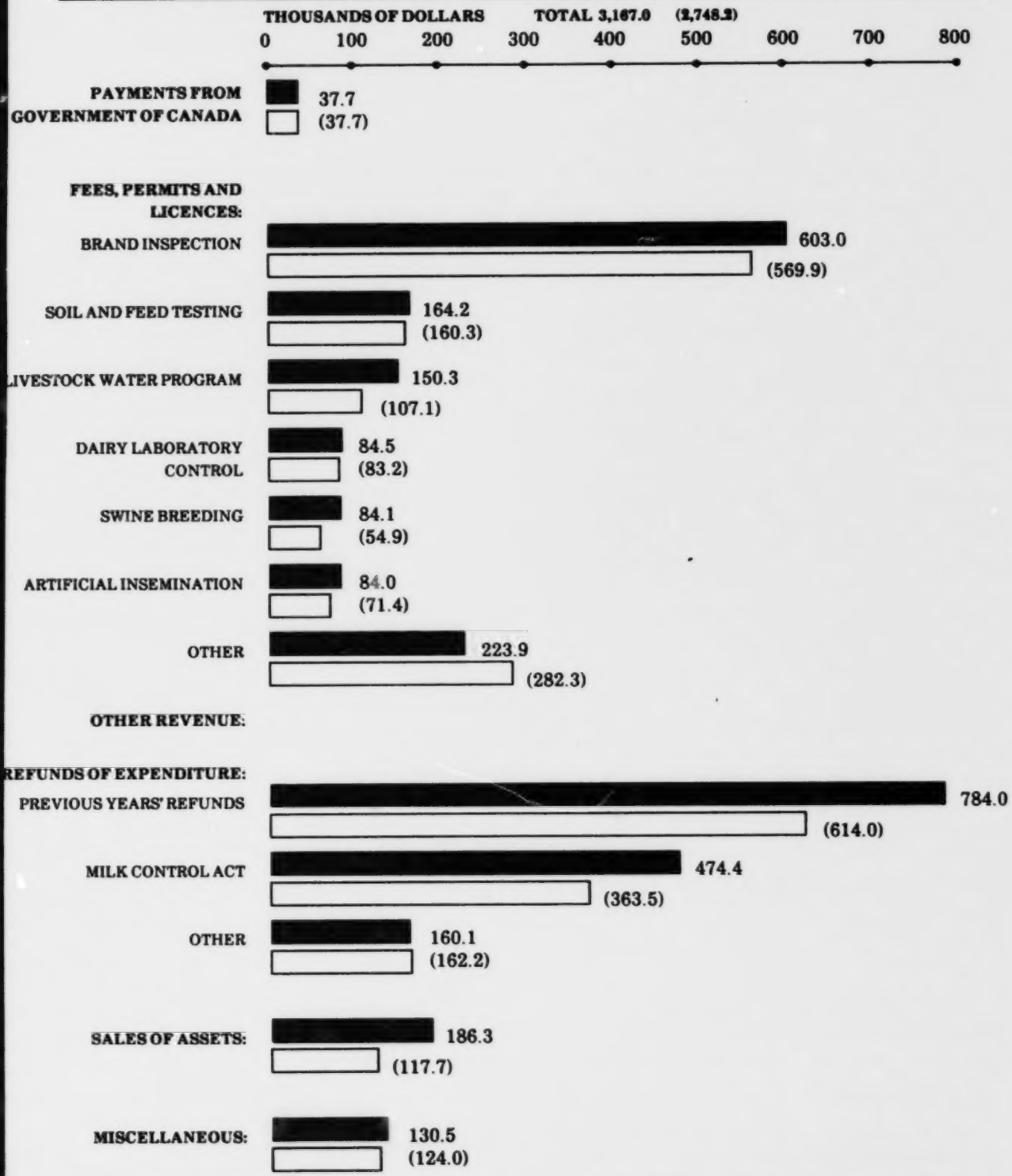


TABLE OF EXPENDITURES 1984-85 UNAUDITED AND (1983-84)*



* Figures in brackets are for 1983-84

TABLE OF REVENUES 1984-85 UNAUDITED AND (1983-84)*



Other revenues received from the Government of Canada, such as the Nutritive Processing Agreement ($2.5 million) and Hail and Crop Insurance ($49.9 million), are not reflected in the above figures, as they are collected and reported by the Alberta Treasury.

* Figures in brackets are for 1983-84

PERSONNEL SERVICES

Personnel services developed and administered policies for the department in the areas of staff development, occupational health and safety, and personnel services.

Staff development provided management advisory services and human resource development co-ordination to ensure that job-related learning was available for all staff. The provision of advice in the management process, including performance appraisal systems, and organization development were also responsibilities of the section.

The section processed 19 applications for education leave and 1,371 applications for training courses of which 594 were in in-service, 501 out-service and 363 in-house.

The division director participated in a secondment project and was appointed manager of classification and compensation with the Public Service Commission for the period of February, 1984 to February, 1985 at which time he returned to his former position as personnel director. A personnel administrator exchanged positions for an eight-month assignment with management services of the Public Service Commission.

OCCUPATIONAL HEALTH AND SAFETY PROGRAM STATISTICS 1984-1985

Total possible manhours	3,240,464
Lost time injuries	33
Medical aid cases	30
Fatalities	1
Frequency rate	10.18*
Severity rate	1,947.59**
Work days lost	311
	+ 6000 (for fatality)

DIRECT COSTS PAID OUT BY THE WORKERS' COMPENSATION BOARD:

Compensation of wages	72,531.44
Medical costs	74,073.54
Pension awards	87,568.86
Average award per claim	3,658.97

* *Frequency rate is the number of injuries per million manhours.*

** *Severity rate is the number of work days lost per million manhours.*

Occupational health and safety concerns were investigated and resolved during the year. The section provided appropriate programs to meet the requirements of the Occupational Health and Safety Act and assisted managers, joint worksite contacts and committees in ensuring that employees had a healthy and safe workplace. In addition, defensive driving and St. John Ambulance first aid courses were provided. As a result of downsizing a portion of this program, it is to be carried out with the assistance of the Personnel Administration Office, and various members of division staff will provide support to other aspects of occupational health and safety.

Personnel services provided wage and salary administration, recruitment and selection, position classification and employee relations services to assist the department in developing a high quality human resource base.

A slight increase in recruitment activities was experienced, with the number of applications received on each competition remaining at approximately the same level as the previous year.

The department was involved with downsizing activities which resulted in the abolishment of 28 permanent salaried positions to be effective April 1, 1985. This was achieved through the abolishment of a number of vacant and encumbered positions from all areas of the department.

PERSONNEL SERVICES: TRANSACTIONS FOR THE PERIOD APRIL 1, 1984 TO MARCH 31, 1985

Number of competitions	110
Commencements	116
Terminations	149
Transfers	84
Reclassifications	90
Classification appeals - upheld	0
- denied	0
- pending	2
Updates	174
Positions creations - permanent	0
- temporary	2

The personnel committee responsible for administering the decentralized classification program for the bargaining unit and opted out and excluded classes met on a regular basis to review classification requests.

A management classification review, which was initiated in the previous year, was in a final review stage. The review was undertaken to improve the evaluation criteria used in differentiating between both class levels and sub-levels and to achieve equitable classification levels between management positions within the department.

The management sub-level review committee processed three submissions, granting the requested sub-level changes. The committee also reviewed two positions that were reclassified into management which required a sub-level allocation decision.

General employee relation interventions occurred within the past year with one grievance being resolved at Level II and two other employees receiving suspension without pay because of poor work performance issues.

PERMANENT POSITIONS AS OF APRIL 1, 1984

	Clerical	Professional	Technical	Others	Total	%
Executive	8	6	—	—	14	1.0
Production Sector	91	153	206	5	455	32.7
Field Services Sector	161	278	10	—	449	32.3
Marketing Sector	23	66	13	—	102	7.3
Research & Resource Development Sector	15	50	76	3	144	10.4
Planning, Economics & Administration Sector	72	87	4	10	173	12.4
Surface Rights	16	14	—	—	30	2.2
Farmers' Advocate	2	3	—	—	5	0.4
Dairy Control Board	7	4	3	—	14	1.0
Marketing Council	1	2	—	—	3	0.2
Grain Commission	2	—	—	—	2	0.1
Department totals	398	663	312	18	1391	100
Percentages	28.6	47.7	22.4	1.3		100

OTHERS: duplicating equipment operators, audio-visual aids technicians, bindery equipment operators, stock keepers, equipment operators, motion picture photographers, maintenance service workers, brand recorder, heavy duty mechanic, mobile drill operators.

DEPARTMENTAL SERVICES

Library

The library served all components of the department throughout the province. The library was responsible for the planning, development, implementation and co-ordination of library services and programs within the department. In addition to the main library, there were 14 branch libraries.

Highlights of the year included improvement of the Alberta Horticultural Research Center Library, publication of a comprehensive bibliography on animal nutrition, the completion of an evaluation of SCITECH (the library's on-line catalogue) and the introduction of the IBM 5520 word processing system in the library. The library reports collection was also reorganized: a departmental archival collection and a general historical collection were created. The recent reports collection was evaluated, upgraded and reorganized in Agdex order. Many of these projects were completed with manpower assistance from the Alberta government's special employment programs.

The library provided a full range of reference and interlibrary services. On-line access to bibliographic data bases was provided using the DIALOG Information Retrieval System and CAN/OLE. More than 575 on-line computer searches were conducted. A demonstration Telidon set continued to be in use to orient staff to GRASSROOTS. Monthly library orientations were held in the main library. Three seminars on "Developing Basic Research Skills" were held in Airdrie, Brooks and Barrhead. The annual library staff workshop was held in Brooks in October. The library continued to grow as a lending resource and an information and referral centre to the private sector.

Considerable input was received from department staff as collection development in core agricultural subject areas was given special emphasis.

UTLAS continued to be used for cataloguing support. More than 3,000 new volumes were added to departmental book collections.

The library participated in the library community by lecturing to university and college students, providing a field location for several student projects, and by active staff involvement in several library associations. The library also provided support on a consultative basis to agribusiness and small agricultural organizations seeking advise on the development of library and information services.

The library distributed a monthly *Library Recent Additions* list, available on request. Several agricultural literature guides were also available: *Guide to Agricultural Periodicals Published in Western Canada* and *Agricultural Conference Proceedings Index.*

Computer Services Branch

The computer services branch continued to provide for the maintenance, development and optimal use of computerized systems within the department.

Ongoing systems included dairy herd improvement, dairy farm inspection, cattle brand retrieval, shelterbelt distribution, veterinary information retrieval, soil and feed testing analysis, soil information (a joint federal/provincial effort), herbicide recommendation, weed alert, a reporting system for Farming For The Future, a financial planning system for market development, an agricultural processing industry directory, fixed assets inventory, departmental mailing labels, departmental telephone directory, budget information, apiculture registry, financial administration and feed freight assistance program.

Development was initiated for the following systems: insecticide recommendation, soil test recommendation, surface rights board automation, financial counselling and farm fertilizer price protection plan.

The branch continued to provide service to department staff in the areas of statistical analysis, mapping and graphics, procurement of hardware and software, data entry, the administration of electronic data processing funds and the management of word processing services.

The branch participated on the communications systems task force in the continuing development of Alberta Agriculture Programmed Access to Communications (AAPAC) to deliver computerized services to the agricultural community via an integrated network of computer devices and software offerings. The infra-structure for AAPAC extending to the regional offices was in operation.

COMMUNICATIONS SERVICES

The communications division provided information to the agricultural industry and the general public on Alberta Agriculture programs, policies, production and marketing.

The department's public relations programs were facilitated by providing organizational support and publicity for special events such as Agriculture Week and the Alberta Agriculture Hall of Fame. Producer groups and agricultural organizations also received assistance.

Production of federal-provincial media projects was maintained through participation in the Canadian Committee on Agriculture Communications.

Print Media Branch

The branch provided technical information on agriculture to farmers and others in the agriculture industry, and general information on agriculture and food to the general public. Staff of the department and associated boards and commissions were provided with advice and training in effective print communications, and editorial and publishing services.

Agri-News, a weekly news release package, provided 558 articles to 235 media facilities and 4,100 other recipients. Special press kits were prepared for the Agriculture Hall of Fame and Agriculture Week, and distributed to the media throughout Alberta. Several seminars and workshops on writing for the media were conducted for department staff. Other press services provided were advice on the effective use of the media, assistance with the editing and rewriting of columns and articles for field staff, and the production of special press releases.

Two hundred and twelve new and revised publications were written, designed, edited and printed for general distribution. This included 140 technical publications for farmers and their families. A monthly listing of these new and revised extension publications, *What's New in Publications*, was produced and sent to 5,900 persons in the agriculture industry. Assistance with the development and placement of the department's advertising was provided.

There were 418 printing jobs placed with commercial printers and supervised by branch editors. The in-house duplicating shop printed a total of 20.7 million pages for the 1,696 jobs it handled. This included 51 different newsletters and reports for regular distribution to the public.

More than 1,200 different publications on commercial farming, home economics and gardening were available to the public from the print media branch and field offices. There were 874,030 copies of publications distributed. The branch responded directly to 22,415 requests from the public and handled 4,786 orders from field offices for publications. All 4-H manuals and other club materials were reordered, stored and distributed by the branch.

Timely information on commercial farming was sent monthly to more than 50,000 readers by means of an insert in the Alberta edition of the *Country Guide* magazine.

Staff graphic artists handled 192 design jobs for the department's printed and audio visual materials.

Broadcast Media Branch

The broadcast media branch produced radio and television programs and 16mm films that helped tell the story of agriculture.

Two hundred and sixty *Call of the Land* programs were produced in 1984 and aired on 15 AM and several FM stations in Alberta. Wainwright (CILW) began airing *Call of the Land*.

Twenty-three film and video productions were completed. These included 11 extension films; two television programs; four public service announcements; five video programs and one news clip. One film, *A Matter of Soil*, was awarded best educational film at the 1985 Alberta Motion Picture Industries Association (AMPIA) Awards. *The Weather Picture*, *Preconditioning* and *Brief Encounters* also won awards at AMPIA.

Over 6,100 films, video tapes and slide kits were lent to department staff, 4-H clubs, schools and other organizations. Twenty-five new film titles, 11 video tapes and seven slide kits were added to the film library.

The branch head helped develop and resource Communicating Effectively With Clients Workshop B. Radio broadcasters were resource personnel for the radio section of Workshop B.

This branch also co-ordinated press relations for a number of department-sponsored activities.

PRODUCTION

The sector undertook research, generated and transferred production technology, provided services and promoted practices to assist Alberta farm families and processors to maximize their financial returns.

The sector consisted of four divisions: animal health, dairy, animal industry and plant industry. The sector continued to be responsible for the administration of 18 pieces of legislation, and operated 14 widely decentralized laboratory, research and service centres in support of the industry. The sector co-operated with and financially supported joint projects with the Faculty of Agriculture and Forestry, University of Alberta; Alberta agricultural colleges; the Western College of Veterinary Medicine; the Veterinary Infectious Disease Organization and the research branch of Agriculture Canada.

PLANT INDUSTRY DIVISION

In 1984-85 the plant industry division of Alberta Agriculture was comprised of five branches: field crops, crop protection, soils, tree nursery and horticulture, and horticultural research. The crop protection and soils branches were located in Edmonton while the field crops branch was located at Lacombe, the Tree Nursery and Horticulture Centre at Oliver, and the Horticultural Research Center at Brooks.

The division's main objective was to provide a service in plant and related sciences to the agricultural industry that would be conducive to greater economic and aesthetic returns to those engaged in agriculture. In its broad concept, this service should be compatible with the principles of environmental concern and resource conservation. The activities of the five branches were geared towards the overall attainment of these objectives.

Field Crops Branch

There was a heavy demand in 1984-85 for information on barley, winter wheat, hard red spring wheat, semi-dwarf wheat, and canola.

A *Soft White Wheat Production* manual was prepared and published. It was based on the results of a survey of the practices and technology employed by successful white spring wheat producers.

The branch prepared the *Canola Production Manual* for the Canola Council of Canada. Fifteen thousand copies were distributed. A summarized version, *Canola Production in Alberta*, was prepared and issued to all extension offices.

The branch provided professional staff to review rapeseed production in India, and improved range management and forage production in China.

Seventy-seven municipal co-op seed plants processed 31 million bushels of cereal grain and oilseeds. Average volume per plant was 402,485 bushels. Forty-two upgrading grants were processed, amounting to $376,393.77 which represented the provincial government's 40 per cent share. Replacement plants were built at Sexsmith ($950,000) and Vegreville ($1.1 million). The provincial government's share of these two plants was 40 per cent, approximately $820,000.

The Grey-Wooded Forage Association was established at Rocky Mountain House, making nine forage associations in Alberta.

The research section developed a new semi-dwarf feed barley named Samson. This was the third variety developed by this 10-year program. Promising material in winter wheat and triticale were being tested.

Seed technology demand continued to be high, involving pedigreed seed production, seed shows, field days, forage seed projects, stock seed distribution, and probationary growers' workshops.

Drought conditions have put long-term pressure on Alberta pastures and rangeland. Extension efforts involved forage seminars, with record attendance at all locations. Forage associations provided an excellent extension medium.

Special crop activities were geared to demonstration plots and working with associations, organizations and extension staff. Interest increased in growing wild rice, comfrey and Jerusalem artichokes. The alfalfa seed industry continued to be very active. Beans, peas, lentils, confectionery sunflowers, corn and buckwheat were the main crops promoted by this section.

Crop Protection Branch

The branch dealt with the mitigation, management and control of crop pests in Alberta. These included weeds, insects, diseases and vertebrate pests.

Pale-western cutworms were more abundant than in 1983 while only isolated fields were infested with red-backed cutworms. Adult populations of flea beetles were higher in the fall than in the previous five years. Some 2,650 hectares of canola were treated to control bertha armyworms. Forest tent caterpillar infestations were heaviest in east central Alberta. Spruce budworms continued to increase in pure spruce stands throughout central Alberta.

Alberta's honey crop approached 30 million pounds, by far the largest on record, with many beekeepers in the Edmonton and Peace regions reporting over 300 pounds per hive. Eighty thousand hives, representing 46 per cent of the Alberta total, were overwintered in 1984-85.

American foulbrood disease continued to decline in incidence and severity. The Alberta queen rearing project progressed from the research phase to the production phase.

Verticillium wilt of alfalfa was limited to the irrigation areas of southern Alberta. Seedling blight occurred quite commonly in canola. Sclerotinia levels province-wide varied from a trace to the five per cent level. The virulent strain of blackleg was identified at six locations in Alberta. Root rots, alternaria and staghead were all reported at trace levels.

The bacterial ring rot (BRR) program was operated and administered by the crop protection branch. Incidence of the disease in 1984 was the lowest in 30 years and was well below the previous four year average. An increase in reports of potato wilts and rhizoctonia was noted.

The Agricultural Pests Act was revised in 1984.

The regional crops laboratory at Fairview provided diagnostic and extension services to the Peace region. A total of 349 specimens was processed. The laboratory at Olds provided a diagnostic, survey and extension service on plant diseases, insects and weeds for region 2 and the western half of region 3.

Weed control in 1984 was generally excellent. The branch provided field staff, industry and producers with updated technical information to facilitate effective weed control. The Weed Control Act continued to be used in most jurisdictions to persuade delinquent landowners to practice adequate weed control. The section worked closely with agricultural service boards throughout the province.

The herbicide recommendation computer program was made available in six regional offices and one district office.

The knapweed eradication program continued, with infestations down from more than 300 acres in 1979 to small patches in 1984.

The urban vegetation management program co-ordinated control measures directed at target weeds in urban areas, as well as those in the surrounding municipality.

Projects to develop practical methods of controlling wild rose, pasture scrub and weeds in natural and improved native pastures were undertaken. Weeds along drainage ditches and irrigation canals required remedial spraying. Projects were established throughout the province to demonstrate effective controls for several weed species.

A co-operative research project on wellsite reclamation was established in conjunction with the Industrial Vegetation Management Association. Other projects included herbicide screening for weed control in legume and grass forages, the systematic evaluation of new herbicide application equipment, and the continuation of weed alert which provided information on weed distribution.

The crop protection branch, problem wildlife section, was responsible for the supervision and co-ordination of three major programs: rat control, rabies suppression in skunks, and the prevention and control of coyote

depredation of livestock and poultry. Alberta was kept essentially free of Norway rats for the thirty-fourth consecutive year.

The pesticide issues co-ordinator addressed a number of issues over the past year through news releases, interviews with radio and newspaper reporters, written articles, films and seminars. A high school text on pesticides and pest control was developed and field tested.

Soils Branch

The soils branch provided province-wide extension, research and diagnostic programs. Soil and feed analyses were provided to farmers on a fee basis and to department staff on a nonfee basis as a diagnostic service, and for research. Soil and plant analysis were also provided on a fee basis to other research institutions. Total soil and feed sample analysis decreased by 6,500 from last year to 43,204 samples this year. Most of the decrease was in farm samples.

Variation in soil tests results and recommendations among laboratories was a major concern. Staff were involved in developing a laboratory accreditation program and an automated (computerized) recommendation system as a means of reducing variability in the recommendations made by laboratories.

Applied research projects were carried out in the following areas:
— soil test calibration
— fertilizer rates and placement
— acid and solonetzic soil management
— diagnosis of specific production problems.

Participation in research projects contributed to:
— a revised soil test calibration for potassium
— the factsheet *Potassium Fertilizer Application in Crop Production*
— the factsheet *Using Nitrogen Fertilizers Effectively.*

The agricultural lime freight assistance program provided over $300,000 in freight assistance grants to 81 applicants transporting 11,700 tonnes of lime and marl. The decrease from the $600,000 assistance offered last year was caused by the early winter and poor economic conditions.

Fertilizer sales increased by 5.8 per cent to 919,108 tonnes. Sales of unregistered and unproven products remained high and a matter of concern.

Alberta Tree Nursery and Horticulture Centre

The Alberta Tree Nursery and Horticulture Centre was the production and distribution site for Alberta Agriculture's shelterbelt program. In 1984, 2.5 million plants were shipped to fulfil 8,279 orders.

Spring shipping was completed earlier than average in 1984. However, the October snow hampered fall activities.

In addition to the annual pruning courses, several workshops on shelterbelt design and maintenance were held throughout the province.

Greenhouse production of seedlings increased slightly from last year. All conifers used in the shelterbelt program were started in the greenhouse and later transplanted to the field.

A total of 11,792 trees and shrubs was shipped to various provincial parks. In 1984, 42,454 seedlings were distributed for Arbor Day programs across the province.

Extension services were provided by the various specialists on staff. The vegetable crop extension specialist provided information on all aspects of production of vegetables and small fruits to growers in central-northern Alberta. The turf specialist was able to assist sod producers and turf managers with cultural practices and production problems. Information was also provided to backyard gardeners through courses, presentations, media and a telephone service. The number of inquiries increased to 5,800 and the hort hot-line received 2,484 calls. A close liaison was maintained with other agencies providing services to the backyard gardener.

The Alberta Tree Nursery and Horticulture Centre was involved with research activities in nursery production, vegetable production, turf maintenance and cultivar evaluations of vegetables, woody ornamentals and grasses.

Alberta Horticultural Research Center

The Alberta Horticultural Research Center (AHRC) Brooks, was involved in province-wide extension and research activities relating to all areas of horticulture and irrigated specialty crops. On and off-site co-operative research projects were conducted in collaboration with personnel from Agriculture Canada and the University of Alberta, as well as from the plant industry branch and the irrigation and conservation division of Alberta Agriculture.

The greenhouse energy program was eliminated and the position was transferred to the center's regional crops laboratory where a permanent position for a diagnostician was established. The center's tree fruit research program was reduced, as was the apiculture program. Two permanent positions were eliminated.

The AHRC operational structure was reorganized by replacing the vegetable and special crops section with three program units: a vegetable and market garden crops unit, a potato unit and a special crops unit. These units and two program sections provided research, development and extension services to specific horticultural and commodity sectors. The environmental horticulture section was responsible for research and extension related to the production of small fruit, bush and native fruit, ornamental and nursery stock and greenhouse vegetable and flower crops.

The vegetable and special crops units provided applied research, demonstration and extension assistance for vegetables, potatoes, corn, as well as a variety of new crops such as beans, forages, grain legumes and herbs and spices.

In addition to providing technical support for the commodity based programs the efforts of the laboratory services section were directed toward diagnosis of plant diseases, insect and weed control, crop storage, food processing and product development.

Administrative and operational support for the above three programs was provided by the administrative services section and the farm operations section, respectively.

Test sites for the research extension function of AHRC staff were located throughout the province. In addition to the utilization of the three farms at Brooks, research demonstration plots were found in locations such as Bow Island, Edmonton, Standard and the Peace River region.

The extension activities of AHRC personnel supported and complemented extension services provided by other Alberta Agriculture staff in regional and district offices. Staff regularly conducted, taught and participated in numerous short courses and seminars held throughout the province. To ensure rapid exchange of information between the producer and the researcher, staff hosted commodity oriented field days at AHRC and participated in similar field days held elsewhere. Membership and active involvement in commodity advisory groups, Agriculture Canada expert committees, and industry-based committees facilitated the dissemination of applied research information to all sectors of the horticulture industry.

ANIMAL INDUSTRY DIVISION

The division's five branches responded to the needs of producers and agribusiness concerned with the production and marketing of meat producing animals and poultry.

Division activities included extending technical information to producers and agribusiness, solving production problems, liaising with other segments of government to improve service to producers, administering and updating acts and regulations in concert with industry requirements, as well as making recommendations for and participating in applied research projects.

The division was involved in negotiating a red meat stabilization program with other provinces and the federal government, as well as developing alternatives for Alberta producers.

The division was reduced in manpower by seven positions, five of which came from the closing of the poultry research centre at Oliver.

Beef Cattle and Sheep Branch

The beef cattle and sheep branch continued to extend technology and to provide production, marketing and financial information to the public with the objective of maintaining viable family farms and agribusiness in this province. The branch was also involved in research and demonstration projects to solve a variety of problems which limited animal production.

In response to a severe summer drought across most of southern Alberta, which was further complicated by the early onset of winter, a prairie livestock drought assistance program was implemented to provide assistance to cattle, sheep and goat producers in maintaining their breeding herds. This program, which was shared equally by the federal government, provided $27.2 million in assistance to 9,973 producers in the areas covered by the program. In addition, the province also implemented a feed freight assistance program with similar objectives to the drought assistance program to provide assistance to drought affected producers outside the area covered by the drought assistance program. This program commenced in the 1984-85 fiscal year and will be completed in the 1985-86 year. It will provide approximately $0.9 million in assistance to about 1,150 producers.

The branch emphasized its activities in animal reproduction, breeding, nutrition and management. It continued with record of performance (ROP) programs, bull test stations, the sheep test station, the warble control program, the artificial insemination (AI) data program, AI schools and the research and development program.

Branch staff participated in extension meetings, farm visits, media presentations, field days and responded directly to many other requests for service. These activities continued to represent the major individual time commitment by branch staff.

The semen evaluation laboratory handled 922 samples of semen from various species during the year. Samples were evaluated for total sperm count, percentage motility, total mobile sperm, morphology and percentage of intact acrosomes.

The AI data program introduced in 1980 continued, with a grant of $1 being paid to licensed inseminating businesses for each insemination reported. A total of $24,212 was paid to 37 participating businesses during the year. The branch discontinued financial support to AI schools at the three agricultural colleges, but remained involved by providing technical assistance at AI schools.

In 1984-85, 216 producers completed the weaning phase of the federal-provincial beef ROP program. The decline in number of participants over the past 10 years has now slowed down. Recent changes to the program have simplified procedures for producers who are generally more satisfied with the program. Those who have resisted enrolling state that part of the program relating to estimated breeding values is still not available, that reliance on the mail delays turnaround time, and that the cost recovery policy currently being discussed by Agriculture Canada is uncertain. It should be noted that many purebred producers are participants in breed association ROP programs.

The branch continued to provide municipalities with technicians under the beef ROP weight supervision program. Under this program, which assisted producers in recording fall weaning weights and spring yearling weights, a total of 32,267 animals on 559 farms and ranches was weighed, about the same as last year. About two-thirds of the calves weighed in the fall were weighed again in the spring, resulting in 19,425 calves in 335 herds that were supervised at weighing in the fall of 1984.

Nineteen private groups conducted central bull test station programs in 1984-85. Approximately 1,430 bulls were evaluated for growth rate from weaning to approximately one year of age at these stations. Eight stations took advantage of branch services of weight supervision and calculating, processing and distributing the test stations results. The branch continued to supervise the operation of the Alberta Beef Cattle Test Station at Ellerslie where a full complement of 200 bulls was included in this year's test.

The Alberta young sire proving program provided a grant of up to $750 per beef bull that completed a progeny test conducted by a recognized testing agency. Two progeny test groups had active programs but no bulls completed a progeny test during the fiscal year.

The sheep ROP home test enabled producers to evaluate wether, ram and ewe lamb rates of gain from birth to 50 and 100 days of age. A ewe index based on productivity was also provided. Purebred enrollments in the program continued to increase slowly, while commercial producers generally dropped off the program as a result of slow turnaround times. Fifty-nine breeders were enrolled in the program in 1984.

The Alberta sheep ROP test station completed its tenth year of operation in 1984. Thirty-seven breeders entered 203 rams in the 56 day growth test conducted at the test facilities on the Olds College campus.

Average daily gains and sale prices were the highest in the history of the station. In 1984, the first wool breeds test involving 25 rams was conducted by the branch at the Olds College facility. The test consisted of a 120-day test for body weight gain and wool growth.

The number of cattle infested with warble grubs continued to decline as a result of the branch's warble control program. Agriculture Canada health inspectors recorded that only two per cent of carcasses were infested in February to May of 1984. This compared with five per cent in 1983, 14 per cent in 1980, and 44 per cent in 1968 before the warble control program began. The department continued to share 60 per cent of the warble control program costs with local governments; the latter were responsible for monitoring local sources of infestation and enforcing the regulations.

In 1984 the branch assumed responsibility for the black fly abatement program. The purpose of this program, which operated in close co-operation with the agricultural service boards in the County of Athabasca, I.D. 18 and Alberta Environment, was to develop methods for relieving livestock of black fly attacks. Activities included the use of larvicides, testing and demonstration of new pesticides and methods of application, as well as detailed monitoring of adult black fly activity.

District agriculture service boards received grants totalling $42,289 to cover 60 per cent of the costs of programs which promoted improved livestock production practices. Projects included demonstrating pest control products and new forced-use cattle oiler systems for pesticides, intensive rotational grazing systems, growth implant demonstrations, livestock management field days and extension meetings.

Alberta livestock breeders received assistance in exhibiting their stock at major international class exhibitions outside the province. In 1984-85, 291 exhibitors received $125,326 to exhibit and show 1,040 animals in four international class shows.

The ration advisory service and feed testing program continued to provide feeding and management information directly to producers and agribusiness. The feed testing lab was involved in the analysis of research samples. In 1984-85, a total of 19,226 feed and plant samples were analysed at the Agricultural Soil and Feeding Test Laboratory (ASFTL), compared with 21,022 in 1983-84. Of this total, 19 per cent were regular producer samples, 14 per cent were diagnostic (demonstration) samples submitted by department staff and 67 per cent were research samples. The proportion of samples in each category was about the same as in 1983-84.

The number of requests for detailed ration recommendations for samples submitted to ASFTL declined to 338 from 427 in 1983-84 and 413 in 1982-83. Most of this decline was in demand for dairy and swine rations.

The branch's active involvement in research and development continued in 1984-85. Projects conducted included forage utilization, canola meal use, near infrared reflectance analysis, on-farm mixing of pig rations, effect of barley bushel weight and processing method on feedlot performance, nutritive value of hulless barley, forced-use of self treatment stations for biting fly control, evaluation of efficacy of ivermectin in warble and louse control, condition scoring of feeder cattle, small area warble eradication, evaluation of Poly Pay sheep, out-of-season breeding of lactating ewes, intensive rotational grazing, round bale silage, Spotton for control of horn flies, triticale versus barley for

feedlot steers, growth implants, effect of energy level and insemination method on conception rate of sows, grass versus feedlot finishing of yearling steers, preconditioning, effects of early weaning on calf gains and cow reproductive performance, relationships between average daily gain and feed efficiency of individual bull calves and a statistical analysis of ram test station data.

Horse Industry Branch

The local market for horses continued to be depressed, but the export market for Quarter horses, although small, continued to increase. In the European marketplace, Alberta was seen as the primary place to purchase Quarter horses.

Recreational activities by horse owners continued to expand.

The branch provided staff or financial assistance for approximately 40 educational programs throughout the province. Staff offered extension services to horse owners through office visits, farm calls, correspondence, telephone calls, technical bulletins and articles published in horse magazines.

The horse improvement program consisted of 50 special classes for the 14 participating light horse and draft horse breeds. Alberta breeders exhibited 650 horses in 1984.

The branch assisted marketing staff and breed organizations in developing promotional and marketing projects. The branch co-ordinated "Alberta Breeds for the World" as a major exhibit of Alberta horses at Equitana North America, and played a major role in the Alberta exhibit at Equitana in Essen, Germany.

The travel assistance program provided a grant to Alberta horse owners participating in national or international breed championships held outside the province. In 1984, 24 breeders from four breeds made use of the program.

As a service to veterinarians and horse breeders, the branch, in co-operation with Olds College, conducted potential fertility examinations on 33 stallions in 1984.

The horse industry branch continued to provide leadership in horse research. During 1984, the branch conducted two horse nutrition projects. The branch continued its support of equine research at the Western College of Veterinary Medicine in Saskatoon.

The branch continued to offer provincial horse organizations a drug testing service at major horse shows. During 1984, 390 horses were tested in 31 days of testing.

Pork Industry Branch

The pork industry branch continued to assist pork producers in the province by providing production, marketing, and financial information, a market price assurance program, swine semen for artificial insemination, and assistance in maintaining performance records.

The information provided was co-ordinated by the branch and delivered by four regional swine specialists, branch staff and other extension staff. Eighteen up-to-date technical factsheets were written by department resource staff, university staff and others for the *Pork Production Handbook*, which has a subscription list of approximately 1,300. The existing 75 factsheets were also made available to new subscribers. A research review column and a column for answering questions on swine nutrition were provided in each issue of the quarterly *Western Hog Journal*, with a subscriber list of 25,000 of which 12,000 are in Alberta.

Staff helped organize, resource and carry out the tenth annual Alberta Pork Congress in Red Deer, with 3,500 attending; the Alberta Pork Seminar in Banff with 130 registrants; an in-service course for 50 department and industry swine consultants, and approximately 25 other regional and provincial extension meetings related to swine production.

Branch staff and the swine specialists made farm calls and conducted office interviews with swine producers, prospective swine producers, ADC clients, and others to solve problems in nutrition, finance, engineering, herd health, breeding, management and other areas related to swine.

Swine semen was produced at the Alberta Swine Breeding Centre at Leduc and distributed. Fresh semen was sold in Alberta and the other three western Canadian provinces in order to establish this technology for the use of Alberta producers, and to help make the best genetic material available to those who could benefit from it. Frozen semen was sold for the first time to export customers, mainly in Mexico, through the Alberta Swine Breeders Association. Research to improve the quality of frozen semen and breeding success with it continued.

Technical service and advice in performance recording for breeding stock selection was provided by three swine technicians to 90 producers enrolled on the record of performance (ROP) program. The program was designed to obtain live weight rates of gain and carcass fatness information. Professional staff designed and provided a record keeping system with appropriate forms, instructions for use, and advice for computerization of the system to over 500 producers.

Research work carried out under branch supervision included seven on-farm demonstration trials with canola meal for growing swine, on-farm research in the use of frozen semen, and a co-operative trial with the University of Alberta to determine the effect of various management practices and heat detection methods on breeding success with artificial insemination. Laboratory research was also conducted into different semen processing methods, methods of measuring semen quality, and comparing various semen freezing techniques.

Market price support was provided by the Pork Producers Market Insurance Plan until the authorized funds were depleted, which occurred when payments were made for hogs sold in September 1984. A $10-million government grant was made to pay the debt incurred by the program when it terminated; approximately $500,000 was subsequently repaid to the government. Approximately 3,400 producers benefitted from the program. Producers received payments of about $12 million this year and paid about $5.6 million in premiums. No provincial support payments or stabilization was available to Alberta pork producers for hogs sold after October 1984.

Poultry Branch

Throughout 1984-85 the poultry branch continued to work with the four poultry marketing boards and with other industry organizations, as well as individual producers to maintain and improve efficiency and income in the poultry industry. The branch administered various regulations and programs under The Livestock and Livestock Products Act. Although quotas in general remained static, gross income increased. Surplus production, brought on largely by increased efficiency, continued to be one of the main problems facing the industry.

The poultry test station operated by Alberta Agriculture was officially closed on March 31, 1985. Final tests at the station were run to show that up to 60 per cent barley could be substituted for wheat in laying rations if the price were right and protein and energy levels were kept constant. Four strains of broiler breeders were tested including two of the new mini strains. Egg production, feed efficiency, hatchability and livability were checked on the breeders, as well as the performance of the offspring both as broilers and as roasters.

The effect of age on lighting of leghorns was checked to see if light leakage in growing houses had an economic impact on commercial layers.

Poultry health programs were undertaken to prevent and control poultry diseases and to safeguard public health. The branch continued to work with the animal health division in monitoring breeder flocks and hatcheries with special emphasis on salmonella reduction. A new emphasis on mycoplasma control in turkey breeder flocks was initiated in 1984.

Other disease conditions, such as ILT, were monitored throughout the year and information on control and eradication were supplied to growers.

Extension services were supplied to present and potential rabbit growers.

Poultry branch staff worked with buyers, sellers, and lending agencies in filling out and reviewing loan applications. Staff co-operated with the production and resource economics branch in the collection and compiling of cost of production data for turkeys and commercial eggs.

Extension services were provided to the entire poultry industry by four poultry specialists located throughout the province, as well as by headquarters staff. A total of 857 farm calls was made, as well as 225 calls to allied trades.

Poultry branch staff again helped organize the poultry industry conference and the poultry serviceman's workshop at Lake Louise. A number of district agriculturists organized small producer meetings featuring poultry branch staff as resource people.

A number of information sheets on poultry production were prepared for distribution to district agriculturist

offices and others, as well as material for the *Agriculture Services Guide* and for the agriculture lender's workshop sponsored by the farm business management branch.

Regulatory Services and Feeder Associations Branch

The main role of the regulatory services and feeder associations branch was the administration of certain acts and their regulations. The acts and regulations were designed to protect livestock producers by providing the following:

- — brand registration
- — brand inspection service
- — licensing and bonding of livestock dealers and agents
- — licensing of stockyards and stockyard operators
- — protection of lands and agricultural products from livestock running at large
- — investigations of fraudulent trade practices concerning livestock
- — a means whereby members of feeder associations may acquire livestock for feeding and finishing.

The feeder association section administered The Feeder Associations Guarantee Act which enabled members of feeder associations to acquire livestock for feeding and finishing.

During the year 37 feeder associations operated under The Feeder Associations Guarantee Act.

During the fiscal year $39,626,822 worth of credit was used to purchase 91,497 cattle and 4,517 sheep by 37 feeder associations. The amount outstanding as of August 31, 1984 was $22,395,655.66.

Under The Stray Animals Act, 1,001 head of livestock were impounded during the year. Eight hundred and eighty-eight head were returned to the rightful owners after they paid the costs of capture, transportation and maintenance. The balance, 113 head, were sold by public auction.

Forty-nine livestock markets and 54 livestock assembly stations were in operation at year end.

There were 941 livestock dealers and agents compared with 912 in 1983. One claim was received against one livestock dealers' bond during the year.

The number of head of cattle and horses inspected through markets and before export was 3,182,153, an increase of 137,488 head from 1983.

Four branding demonstrations were conducted and well attended.

SUMMARY OF FEEDER ASSOCIATION OPERATIONS 1979-1984

Feeding Season	No. of Assn.	Cattle	Sheep	Amount of Credit
1979-80	37	56,312	2,923	27,315,695
1980-81	37	63,151	3,441	28,157,530
1981-82	38	68,710	4,080	27,761,209
1982-83	33	75,917	5,895	32,585,619
1983-84	37	91,497	4,517	39,626,822

The feeder association year ends August 31.

RECORDING OF BRANDS SUMMARY

	Cattle	Horses	Sheep	Total
New brands issued	1,534	487	1	2,022
Transfers	661	96	0	757
Certified extracts	0	0	0	0
Cancelled brands	380	47	0	427
Brands renewed	9,968	1,290	6	11,264
Brands reissued	113	23	0	136
Brands in good standing at December 31, 1984	45,746	7,357	13	53,116

DAIRY DIVISION

The dairy division assisted dairy producers and processors through inspection, consultation and demonstrations to ensure the economic production of legal, safe and wholesome dairy products. The division also supported and encouraged industry to manufacture new dairy products and to expand the processing of value-added products.

As part of the department's regional approach to delivery of extension programs, the division provided training, co-ordination, resource information and services to regional staff.

Privatization of the milk recording field services program was completed. The division continued to provide data control and computer analyses of all production records associated with dairy herd improvement.

To more effectively meet the needs of the regional extension delivery system within Alberta Agriculture, the dairy division was reorganized into two branches: the dairy production branch and the dairy processing branch.

Dairy Production Branch

The dairy production branch conducted the dairy farm inspection program, provided resource information and material to the regional delivery system, and was responsible for developing, co-ordinating and evaluating provincial dairy extension programs. It also provided milk recording data control and record interpretation advisory services.

Dairy farm inspection and advisory services were provided to dairies with respect to milk quality, milking management, dairy facilities and milking equipment.

Farm inspections were completed on behalf of the Alberta Agricultural Development Corporation concerning the dairy development program.

Assistance and support were provided to a dairy co-operative concerning its initiative to certify all milk producers.

The number of milk producers continued to decline. There were 51 fewer milk producers in Alberta in 1984 compared with 1983. Of the 1,638 milk producers as of March 31, 1985, 1,502 were certified for the fluid milk market and 136 were industrial producers.

The milk grade and price program completed its third year in 1984. Milk quality improved each year of implementation of the program. There were 318 grade adjustments made for violations, down from 342 a year earlier.

Advisory services concerning mastitis prevention and control were provided to producers to supplement monthly bulk tank somatic cell count information.

The Alberta dairy production home study course was offered to the public, with over 500 persons enrolled by year end. Many dairy extension meetings based on the course were held during the winter months. In addition to regular course lessons, supplementary materials were developed and used in the areas of herd health, milk marketing and use of production records.

An individual cow somatic cell counting program was made available to Alberta dairy producers through the co-operation of the Alberta Milk Recording Board. All those involved in milk recording programs were eligible to participate. Some 400 herds were enrolled. The fee for this service was set at $2 per cow per year to cover laboratory operating costs.

Production Plus Clubs continued to be popular with producers. Fifteen clubs were organized with approximately 75 participants.

The milking equipment evaluation service continued to be in demand by both producers and equipment installers. One hundred and eighty-four equipment checks were completed on Alberta dairy farms during the year.

A study of stray voltage on Alberta dairy farms was conducted during the summer of 1984.

The third annual Alberta dairy seminar, jointly sponsored by the University of Alberta, Alberta Milk Producers' Association Ltd. and Alberta Agriculture was held in Banff.

Interest continued in whey utilization and disposal. A farming for the future project was completed utilizing whey as a feed for dairy cattle as an alternative to disposing of it.

The Alberta Dairy Producer newsletter was issued monthly.

The dairy production branch in co-operation with the Alberta Milk Recording Board provided the dairy herd improvement (DHI) program to 789 herds in 1984. Of

this total, 81 herds were enrolled in the official supervised option and the remainder participated as owner-sampler herds. A total of 64,827 cows was under test, an increase of 659 over the previous year. When combined with cattle included on the federal record of performance (ROP) program in Alberta, two-thirds of the dairy cattle held on commercial dairy farms in Alberta were enrolled on either a federal or provincial milk recording program.

Average milk production per cow increased to 6,469 kg (14,262 lb) for herds on DHI. This was an increase of 289 kg per cow over the previous year.

The national identification program (NIP) continued to be a major component of the DHI service, with approximately 20,000 heifer calves recorded during the year.

DHI service fees, as administered by the Alberta Milk Recording Board were $5 per cow tested for the owner-sampler and $18 per cow tested for supervised services.

Branch staff were directly involved in the development of a new national milk recording computer program. This development was carried out in co-operation with other milk recording agencies in Canada, and will be ready for implementation in Alberta early in 1986.

Branch staff co-operated with the Alberta Milk Recording Board staff and dairy producers to ensure the efficient and effective delivery of the total milk recording service.

Dairy Processing Branch

Dairy specialists inspected each dairy manufacturing plant regularly, collected samples for laboratory analysis, and submitted the results to the branch, the respective plants, the provincial Board of Health and appropriate local health units.

Unsatisfactory reports were followed up by special inspections and detailed discussions with plant personnel.

Virtually all freshly processed milk from plants in Alberta complied with Board of Health standards, and over 79 per cent of products sampled at processing plants exceeded these standards following "stress" testing. Increasing emphasis was placed on maintaining quality up to and beyond the "pull date" or "best before" date on the package. Fluid and cultured products were tested microbiologically following seven days' storage in an environment designed to simulate conditions in a typical household.

Annual plant inspections were conducted jointly by provincial and federal inspectors. Each plant received a numerical rating thus enabling an intra- and inter-provincial comparison. Alberta's provincial rating remained the highest in Canada. The following table illustrates the high standards in Alberta dairy plants for the last three years.

ALBERTA DAIRY PLANT RATINGS COMPARED WITH THE NATIONAL RATINGS

	1982	1983	1984
National average plant score	82.4	82.2	82.3
Alberta average plant score	88.1	88.0	87.5
Lowest scoring plant in Alberta	77.1	72.7	76.7
Highest scoring plant in Alberta	99.9	99.4	98.9

The certification of all dairy plant workers in Alberta continued at a high level because of continued efforts by dairy specialists and a substantially lower level of plant employee turnover.

Raw milk supplied to dairy plants was examined for sediment, off-flavors, and specific types of organisms that could affect keeping quality.

Sampling and testing of bulk milk received at Alberta dairy plants continued to be of major concern with special attention paid to preventing milk containing antibodies or inhibitors from entering the system.

Bulk milk grader training and surveillance were increased.

Dairy manufacturing plant licences issued in 1984 totalled 37.

Two new fluid milk plants were constructed during the year, with operations scheduled to start in 1985. Surplus fluid milk focused attention on industrial milk processing, especially cheese manufacture. During 1984 a major cheese cutting and packaging facility was relocated.

The Alberta Cheese Specialist's Report

The provincial cheese specialist continued to update starter culture technology in Alberta's cheese factories.

The incorporation of the latest culture methods in the manufacture of products other than cheese, and the evaluation and selection of equipment for a new cheese manufacturing plant were other activities.

ANIMAL HEALTH DIVISION

Division staff working in various service and program areas provided expertise, information and assistance to animal owners, veterinary practitioners and others in order to help diagnose and control animal disease and assure a safe food supply.

Drought conditions and an early winter put severe pressure on feed supplies for livestock, resulting in a number of cases of malnutrition and starvation. Inadequate nutrition also contributed to cases of abortion, stillbirth and calf scours.

Because a large amount of grain was left in the fields over winter in the Peace River region as a result of the early winter, the possibility of toxins being produced by fungi growing in the grain was investigated by the division.

Alberta was declared free of brucellosis during the year, marking a very important milestone in the eradication of the disease in cattle. The province was also free of tuberculosis in cattle.

The rabies control program in skunks continued to dramatically reduce the number of positives. The County of Forty Mile has not had a rabies positive skunk detected since June 1982, the County of Newell since April 1984 and the County of Warner since December 1984. During the fiscal year only four positive skunks and five positive bats were detected.

Division staff again provided advice and assistance to livestock owners whenever a disease that might be transmitted to humans was diagnosed. Assistance was provided when salmonellosis was found in dairy herds, poultry flocks and the occasional beef feedlot.

A new Veterinary Profession Act was passed by the legislature.

A consultant's report on livestock medicine usage was provided to representative industry groups for their review and comments.

Health Management Branch

To more correctly portray the present goals and objectives of the branch, its name was changed during the year. Prevention and control of diseases in livestock herds, the administration of legislated animal health programs and the safeguarding of human health by the control of designated diseases and the enforcement of regulations for sale of livestock medicines continued to be major responsibilities. Techniques for disease prevention and improved production were emphasized to livestock producers and veterinarians. Veterinarians in private practice conducted all the auction market inspections, community pasture inspections and preconditioned program visits. In addition, they were utilized to varying degrees for swine herd health visits, extension work and disease investigations.

All branch veterinarians were actively involved in extension aimed primarily at livestock producers, although presentations to professional groups and students were made on occasion. Veterinary practitioners also participated in extension activities and continued to rely on the branch slide kit and film library for resource material. Expansion of this library was achieved largely due to the efforts of a STEP student. In addition, articles, factsheets, and news releases were prepared and a number of telephone interviews conducted.

Some progress was made in the development of an overall disease surveillance system. More detailed information was collected on diseases of particular interest to the branch, including those diseases named in the designated communicable disease regulation. Following a diagnosis of any of these, appropriate action was taken to bring the outbreak under control and prevent spread to other premises. On a number of occasions disease problems on farms were investigated in depth, frequently following referral by the practising veterinarian. Most of these were on premises occupied by swine, beef or dairy cattle.

The commercial section of the swine herd health program had a significant increase in enrolment as swine producers continued to see the benefits of paying closer attention to health and as the number of private veterinary practitioners with an interest in swine continued to grow. Branch veterinarians carried out the bulk of the inspections in the seedstock section, as both the major show and sale committees and the ROP program relied on health monitoring by government personnel. The semi-annual publication of snout and lung scores continued for seedstock herds which resulted in a much greater awareness of respiratory disease by all sectors of the industry. Commercial herd inspections were conducted by veterinary practitioners.

All livestock passing through Alberta's auction markets or entering community pastures was veterinary inspected to limit the spread of disease. One-half of one per cent of all animals inspected were rejected. Fewer problems were reported on the community pastures, but all animals that died were subjected to a postmortem examination by the local veterinary practitioner.

Licensed livestock medicine outlets were maintained to provide farmers and ranchers with a convenient source of certain livestock medicines. Regular supervision was provided to ensure that these outlets met the requirements of the regulations. A major revision to the livestock medicine regulations was underway following a study completed last year.

The provincially owned veterinary clinics at Edson, High Prairie and Fairview continued to be strong and viable practices, whereas those at Valleyview, Manning and Fort Vermilion required some financial support in order to retain a veterinary practitioner at these locations. All these clinics provided a full range of veterinary services to the public.

The Alberta certified preconditioned feeder program saw a substantial increase in activity during the year as a result of drought conditions and the provision of a free veterinary farm visit to vaccinate and certify the calves. Sickness and death loss in preconditioned calves were considerably lower than for regular calves and preconditioned calves were shown to gain significantly more weight than other calves.

The bovine respiratory disease project, funded by Farming for the Future, continued as a joint project between Alberta Agriculture and the Veterinary Infectious Diseases Organization in Saskatoon. The objective of this major study was to determine the risk factors associated with respiratory disease in feedlot cattle in Alberta. A trial to assess the efficacy of pinkeye vaccine, funded by the department research fund, showed that its use did not reduce the occurrence of pinkeye. Two other trials, one involving pasteurella vaccine in cattle, and the other parvovirus vaccine in swine, were completed.

Pathology Branch

The pathology branch offered an animal disease diagnostic service to primary producers and their veterinarians, to various public institutions, and to the rural and urban public. Many disease problems were identified to aid in the reduction of livestock losses and the prevention of disease. Results were utilized as educational aids, and to update veterinarians and producers on diseases occurring in their area. All reports remained confidential, but were summarized for the animal health division newsletter and for various reports designed to maintain awareness of animal disease in the province.

Branch activities were divided into three sections: poultry, reproduction, and animal; all provided specialized disease diagnostic service to particular segments of an industry. In 1984, companion animals (dogs, cats and other pets) were assessed fees for postmortem examinations in order to reduce caseloads and encourage development of a private alternative. The caseload from central Alberta dropped 23 per cent to approximately 10,000 submissions during the 1984 calendar year. Through the diagnostic submissions, there was considerable liaison with other departments (Energy and Natural Resources, Environment, etc.) and

other institutions (U of A, Parks Canada, etc.). The branch engaged in disease-oriented research to solve diagnostic problems and participated in detailed disease investigations on farms. These endeavors often utilized a multidisciplinary approach with other branches and were important in improving diagnostic methods and increasing the branch's appreciation of on-farm conditions contributing to disease.

Extension activities included considerable consultation with primary producers and their veterinarians about disease problems. The branch continued its emphasis on extension, publishing eight factsheets in 1984, as well as press releases in *Agri-News* and five scientific articles. Parasitology manuals were developed for veterinarians and technicians, and a laboratory manual was released for pathologists in the animal health division. Computer recall of case material was improved, allowing for quicker response to telephone requests and easier identification of problems which repeatedly occurred on individual farms. New history sheets compatible with existing computer facilities were introduced. These provided an aid to disease investigation, allowing the data collected to indicate management weaknesses associated with disease, and provided more accessible regional data to veterinarians and livestock specialists.

The branch continued to de-emphasize laboratory testing related to calf scours, replacing it with in-depth consultation with producers experiencing severe calf scour problems. Emphasis on control of this disease by good management appeared to be paying dividends. The bovine respiratory disease complex continued to be a major feedlot problem. A similar preventive approach was developed as antibiotic resistance became more common. Emphasis was placed on ageing the lesions of pneumonia and providing pathologic descriptions which would help characterize the events which occurred.

The reproduction section continued to stress the necessity of adequate protein and energy in the ration and adequate attention to the stages of labor to help reduce the number of weak calves. A slaughter plant survey was initiated to help in the assessment of intrauterine growth retardation of aborted fetuses. The research on "Shaker calves" was completed and published in the scientific literature. Newborn calves were sent to John Hopkins Medical Research Centre in Baltimore for further study.

The poultry section continued to work closely with the industry with respect to rapid diagnosis of disease and compiling data with regard to chronic diseases such as leg weakness. Applied research was initiated on hard liver syndrome, ascites, round heart and a variety of problems associated with transportation and slaughter. Psittacosis was monitored in pet birds because of the public health hazard.

Experiments on the transmission of pasteurella were continued to establish whether the organism isolated from the last bighorn sheep dieoff could affect domestic sheep. Co-operative efforts by fur farms and the animal industry division included semen evaluation of foxes and Melatonin implants to aid in the early furring out of mink.

During the winter of 1984, malnutrition was a major problem in central Alberta, especially associated with horses and cattle left in the field.

Reference Laboratories Branch

The primary responsibility of the branch was to provide an efficient and accurate laboratory support service for the diagnosis of infectious diseases and noninfectious conditions such as nutritional deficiencies and poisonings. This service was provided primarily to government veterinarians, private practitioners, livestock producers, and professionals at other institutions. Special province-wide services such as virology, electron microscopy, and chemical analysis were provided.

A secondary responsibility was to develop faster and more accurate methods of disease diagnosis. A consultation service was provided to producers, veterinarians, and other agencies. A special three-week workshop in veterinary diagnostic services was provided to 10 visiting Indonesian veterinarians in co-operation with the sponsor, Olds College.

A total of 79,270 specimens was processed in various sections, which represented a six per cent increase from the previous year.

Regional Laboratories Branch

The laboratories located in Fairview, Airdrie and Lethbridge continued to provide a disease diagnosis service to livestock producers and their veterinarians of northern, south central and southern Alberta. Laboratory personnel provided a consultation service on matters of livestock disease to producers, veterinarians and other government agencies. Field trips were made to investigate unusual or serious disease problems. Staff veterinarians participated in extension programs related to animal health concerns.

Veterinarians at the three laboratories co-operated with fish and wildlife personnel investigating health problems in fish and wildlife, and assisted predator control officers in their investigations.

The Fairview laboratory provided instruction to animal health technician students of Fairview College and the Northern Alberta Institute of Technology. The Airdrie laboratory provided instruction to students from Olds College.

Personnel from the Lethbridge laboratory were involved in investigations into possible animal health problems as a result of the natural gas leak in the Claresholm region.

Drought conditions were reflected in some unusual health problems in cattle related to poor water quality, poor quality of feed and less than adequate amounts of feed.

The early onset of winter resulted in considerable acreages of grain left unharvested in the Peace River region and there was some concern that this grain would be unsuitable for animal feed when harvested in the spring. Personnel from the Fairview laboratory participated in a study conducted to investigate this matter.

Meat Hygiene Branch

During the fiscal year April 1, 1984 to March 31, 1985 the meat hygiene branch employed two supervisors, five regional supervisors, one clerk typist and 35 inspectors on a full-time basis, as well as 20 inspectors and 102 veterinarians on a part-time basis.

Inspection was provided for 74 red meat plants and 81 poultry plants including 74 operated by Hutterite colonies.

Livestock inspected during the year included 44,093 cattle, 72,166 hogs, 8,075 sheep, 1,126 goats, 77 buffalo, 1 yak, 11,992 rabbits, 97,570 ducks, geese, turkeys and pheasants, 2,009,810 broiler chickens and 267,717 fowl.

Cattle slaughter was up marginally from previous years and hog slaughter increased about 15 per cent. Sheep slaughter was down about 18 per cent. Rabbit slaughter was down about 60 per cent as Alberta's only rabbit plant ceased to exist in 1984. Poultry slaughter increased significantly. The only secondary processor the branch inspected achieved federal status in 1984.

Carcass condemnations for the year were approximately one per cent for cattle, .85 per cent for hogs and 1.75 per cent for other types of livestock. In addition, 52,635 portions of animals were condemned.

Enforcement activities continued during the year with approximately 75 possible violations being investigated. Most were found to be either not in violation, or were persuaded to cease their activities. Four charges were laid against private citizens and all four were convicted. Investigational activities were curtailed towards the end of the year because of possible impending changes in the regulations.

FIELD SERVICES

The field services sector was the principal means through which the department provided technological information and services to improve the effectiveness and profitability of farming and farm families, and to maintain the quality of rural life.

The sector embodied six regional offices, each designed to meet local needs through a network of regional specialists and district offices. It also included the home economics and 4-H division and the engineering and rural services division. The rural services section incorporated the department's work with agricultural service boards, agricultural societies and agricultural development committees.

During the past year, staff of the sector placed a great deal more emphasis on the economic aspects of agricultural production in their extension activities. Of particular note was the introduction of the farm financial counselling program; increased numbers of financial management courses offered by district agriculturists and district home economists in association with regional specialists; and increased individual financial management counselling by district and regional staff.

HOME ECONOMICS AND 4-H DIVISION

The home economics and 4-H division carried out diversified educational programs to meet the needs of farm families to assist them in furthering their abilities to manage the physical, economic and social well-being of their families. Increased priority was given to farm financial management.

Advisory services and information were provided on farm and home management, time management, ways to supplement the farm income and farm record keeping. The 4-H program emphasized leadership and project skills development. Resource materials were developed in these areas.

Division staff participated in the development of a film, *Brief Encounters*, which dealt with individuals and their influence on groups. The film has seen use internally and externally by various groups and organizations. Increased emphasis was placed on training staff in the area of communication skills.

The 4-H branch offered 30 individual projects to over 8,000 members. Beef, light horse and clothing continued to be the most popular. In 1984, 78 per cent of the 8,312 4-H members resided on the farm, 12 per cent were rural non-farm residents and 10 per cent resided in urban areas. Forty-four per cent of the members were male and 56 per cent female.

Media releases from the 4-H branch increased significantly: to newspapers by 66 per cent, to television stations by 69 per cent. Radio releases decreased by 21 per cent. "Ridin' Hi With 4-H" was the theme of the promotion campaign.

Overall home economics client contacts decreased by nine per cent, however, the subject area of finance and economics showed a significant increase both in educational programs (85 per cent) and individual contacts (119 per cent). The number of farm visits in the home management area increased 90 per cent.

In response to the continued interest in foods and nutrition, the specialists provided technical support to other branches and agencies. Participation by schools in the nutrition at school program increased by eight per cent to 210 schools.

Individual contacts in the 4-H area by the home economics branch increased nine per cent and 4-H educational courses seven per cent. Farm visits on 4-H were up 79 per cent. Individual contacts in the area of marketing and promotion of agriculture products increased 58 per cent.

Home Economics Branch

The home economics branch continued to address the needs of individuals and families by delivering practical and timely programs and services aimed at increasing people's ability to control the quality of their lives. Through a network of district home economists, nutrition at school co-ordinators, community-based organizations and volunteers and the media, thousands of children, youth and adults were reached by the department's home economics extension service.

A number of new initiatives occurred in 1984-85. In co-operation with the Alberta Food Processors Association and the market development division, Better Buy Alberta promotions were undertaken in Drumheller, Ponoka, Rimbey and Wetaskiwin to increase the demand for Alberta food products. Approximately 20,000 consumers were contacted directly through in-store promotions. Home economics branch staff members were the vital link at the community level for these major projects.

In addition to all regions making extensive use of the local print and broadcast media, the branch prepared an insert for the March issue of the *Country Guide*. With the theme, "In The Interest of Time", the insert contained articles on the management of time.

In region 3, *Success Through Farm Management*, a six-part self-directed learning package on farm and home management was prepared and distributed to 400 farm families.

A study on farm family expenditures initiated by the district home economist at Stettler was completed. Data from the six farm families generated interest in the need for further research.

Another innovation this year occurred in regions 1 and 5 when pressure canners were purchased for loan to individuals to encourage the use of safe home food preservation methods. In some districts this was jointly undertaken with the agricultural service board.

Family resource management specialists worked with regional economists and the farm business management branch to develop materials and provide training to district home economists in the area of farm record keeping. A pilot project to collect farm family expenditure data was jointly initiated with region 4. This led to an expanded farming for the future project with the department of rural economy at the University of Alberta to collect data province-wide.

In addition to their ongoing technical support to district home economists, the food and nutrition specialists worked with other branches and agencies. This collaboration resulted in a brochure and calendar for farmers' markets, several news releases, a slide tape on meat inspection, and the distribution of consumer brochures on various commodities. In support of a priority on food preservation, newspaper articles were prepared for major newspapers in Calgary and Edmonton. A learning package on weight control designed for use by community groups was prepared and distributed to district home economists.

Extensive work in protective clothing for use with pesticides was carried out by clothing and textiles specialists, often in conjunction with crop protection branch staff. The farming for the future research entitled *Efficacy of Selected Laundry Practices Used by Alberta Farmers in Removing Pesticide Residues from Clothing* provided information for more effective programming. A new program, Sewing for Profit, appealed to clients interested in ways of supplementing family income.

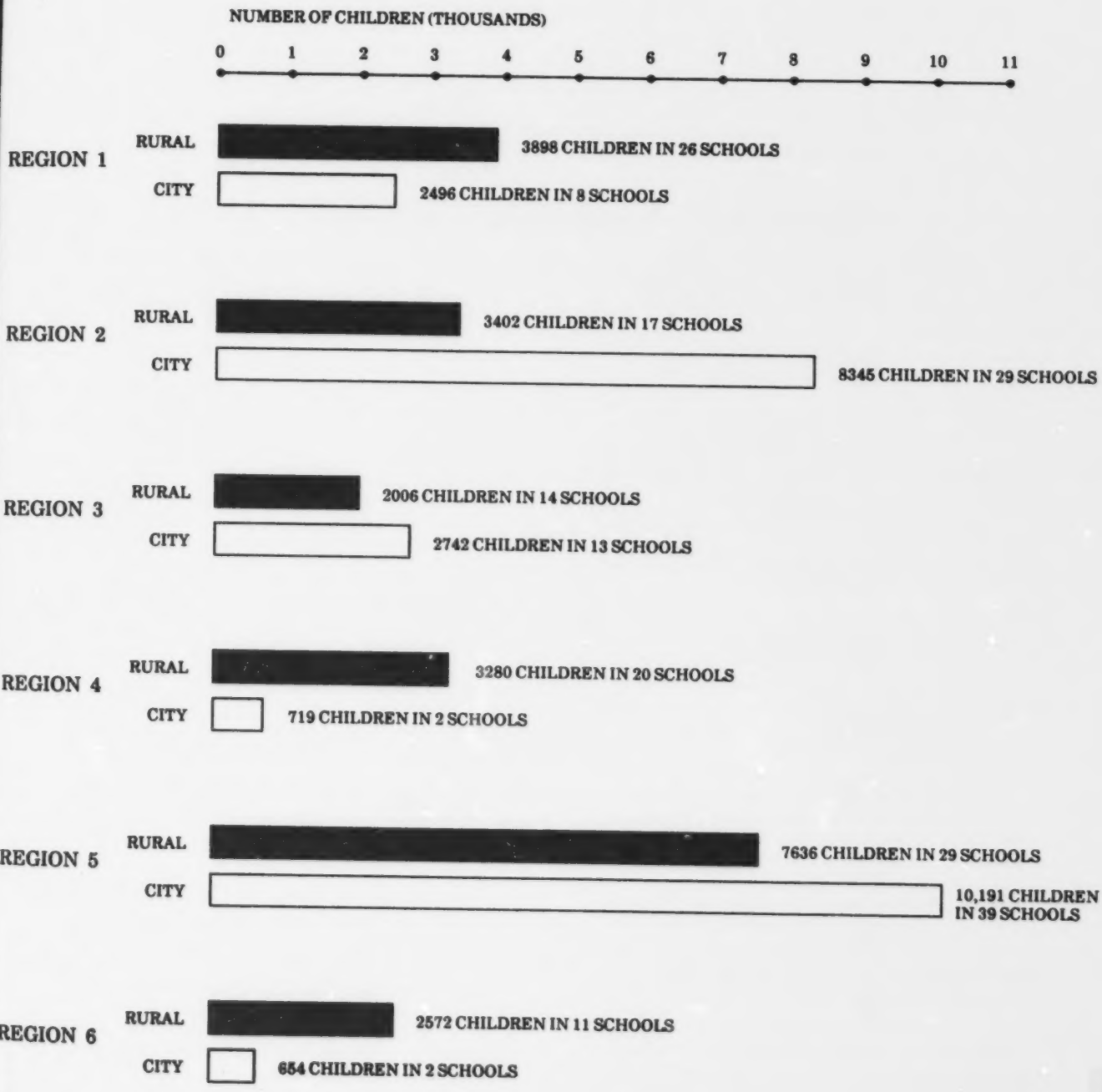
The nutrition at school program was implemented in 210 elementary schools, an increase of 16 schools over 1983-84. Parents of the 47,941 children participating in the program were sent a series of six nutrition-related newsletters. A feature film, *The Food You Eat*, which describes the nutrition at school program was completed. A province-wide nutrition poster contest was introduced with a number of schools submitting entries.

Client contacts, both individual and through education programs, decreased by nine per cent from 1983-84. Contributing to this decrease were several vacant district home economists positions resulting in reduced services being provided for varying periods in some regions.

While total contacts were down, contacts in some subject areas were up. Educational programs in finance and economics increased by 85 per cent and individual contacts in this area were up by 119 per cent over 1983-84.

Contacts in the 4-H area increased both through individual and group contacts. A district 4-H fun-a-rama, the first of its kind in the 4-H Calgary region, was held. In region 5, a regional 4-H leaders' workshop, To Teach You've Got to Reach, took place.

STATISTICAL STUDY
NUTRITION AT SCHOOL
1984-85



TOTAL NUMBER OF CHILDREN ON PROGRAM: 47,941
TOTAL NUMBER OF SCHOOLS: 117 RURAL 93 CITY

HOME ECONOMICS BRANCH
STATISTICAL PROFILE OF
SUBJECT AREA ACTIVITIES (PROVINCIAL TOTALS)

SUBJECT AREAS OF CONTACT	OFFICE INTERVIEWS	TELEPHONE CALLS	FARM VISITS	LETTERS	TOTAL INDIVIDUAL CLIENTS	EDUCATIONAL PROGRAMS NUMBER OF COURSES	EDUCATIONAL PROGRAMS COURSE ATTENDANCE
NUMBER OF CLIENTS	24,065	69,926	2,733	49,069	145,793	2,840	62,997
FOODS AND NUTRITION	7,692	26,977	336	14,614	49,619	971	18,598
HOME MANAGEMENT	2,660	8,963	327	8,124	20,074	391	9,566
COMMUNITY WORK	2,680	8,410	377	6,553	18,020	119	3,865
4-H ACTIVITIES	3,002	5,228	370	4,842	13,442	200	6,156
CLOTHING AND TEXTILES	2,114	7,656	170	2,879	12,819	422	8,395
HOUSING	2,049	3,727	544	3,463	9,783	54	962
NUTRITION AT SCHOOL	748	4,618	492	3,256	9,114	438	9,004
MISCELLANEOUS AGRICULTURE RELATED	1,484	2,113	79	1,229	4,905	32	914
FINANCE AND ECONOMICS	627	730	71	2,702	4,130	113	1,805
FAMILY LIVING	590	1,080	27	778	2,475	65	1,835
HORTICULTURE	628	1,172	72	355	2,227	11	404
MARKETING AND PROMOTION	261	581	29	1,125	1,996	24	1,493

■ = 2,500 CONTACTS

FIGURES FOR "NUMBER OF CLIENTS" MAY TOTAL MORE THAN "TOTAL INDIVIDUAL CLIENTS". ONE CLIENT MAY BE CONTACTED ON MORE THAN ONE SUBJECT AREA.

YEAR:
APRIL 1, 1984 TO
MARCH 31, 1985

Throughout the province, women showed enthusiastic support for 19 conferences of one to four days in length. At several conferences, including Alberta Women's Week, attendance exceeded 200 resulting in a total of 2,500 additional client contacts through educational conferences.

With themes ranging from "Women In Agriculture - Growing Greater" to "Creating a Balance", most were aimed at increasing farm women's skills in time and financial management and in building their self esteem as partners in the family farm. The family farm provided the focus for additional programs as evidenced by themes such as "Building Together, The Farm Family" and "Managing the Family Farm".

4-H Branch

The 4-H branch served a core clientele of 8,312 4-H members and 2,406 leaders associated with 536 clubs. Since some members took more than one project, the number of project memberships was 9,113. The number of 4-H members declined by three per cent from 1983-84. The ratio of core clients to professional staff was 715 to one.

The 4-H program provided for the development of these skills: money management, decision-making, record keeping, public speaking, animal husbandry, problem solving, computer literacy, meeting management, program planning, resource identification and management, clothing construction, food preparation and handling, marketing, showmanship, leadership, and hazard identification. The key vehicle in the 4-H program was the individual project which was completed by each member. The 4-H branch offered 30 projects, the most popular being beef with 40 per cent of the total membership and light horse with 18 per cent.

New training materials encouraged independence on the part of users. Manuals were revised by staff for the beef, light horse, dairy, blue bird, and foods projects. Project outline brochures were printed to promote the canine, craft, computer, gardening and small engines projects. To develop leaders' instructional and planning skills, the manual *Helping You To Help Others Learn* was prepared and distributed. A collection, *Communication Training Ideas*, was assembled and distributed to 4-H leaders and junior leaders as resource materials.

Slide-tape kits were prepared to inform the 4-H clientele about eight 4-H programs. Twenty-five Clubtime shows were prepared and aired from nine stations. Fifty-two 4-H News Roundup radio programs were broadcast from 18 radio stations. Staff provided input to the new film *Brief Encounters* which deals with group effectiveness. A comprehensive training package on the topic of program planning was prepared for use by 4-H leaders, 4-H staff and district home economists.

4-H staff conducted workshops on the topics of leadership, motivation, specific 4-H projects, time management, goal-setting, communication and public relations. Client groups included agricultural societies, the provincial seed plant association, women's institutes, rural education and development association workshop delegates and agricultural service boards as well as the main 4-H core client group.

The "Ridin' Hi with 4-H" promotion campaign continued through public service television and radio announcements; printed messages on 2.25 million grocery bags and 4 million milk cartons; buttons; mall displays; stickers; and personal appearances by Tom Eirikson, 4-H promotional spokesman and Doug Sawyer, 1984 Premier's Award winner. Doug Sawyer also served on the provincial International Youth Year minister's advisory committee.

One hundred and thirty-eight senior 4-H members attended the provincial selections program studying the theme "Promotion - the Key to Success". Sixty delegates received award trips to attend events in Ottawa, Washington, Langley, and Northwest Territories, to name a few. Ninety-one members trained at the leadership through counselling seminar; the majority practised their skills as volunteer 4-H camp counsellors later in the summer. Two hundred and fifty-one members attended two provincial Club Weeks. The provincial dairy show and the beef heifer show attracted 90 and 225 participants respectively. The provincial leaders' conference involved 309 leaders. Four hundred and fifty 4-H members participated in Horse Sense/Expressions. Conservation camp roster included 64 delegates from all over Alberta. Delegates dealt with soil, water, forestry, range management and fish and wildlife concerns at conservation camp.

Ninety senior 4-H members attended the communication festival; two festivals were cancelled because of blizzards. Many festival graduates conducted public speaking workshops as volunteers in their home

clubs and districts. Almost 8,300 4-H members participated in the annual 4-H highway clean-up, cleaning 4,731 miles of roadside. Delegates also represented Alberta 4-H at the Alberta Dairymen's Association annual meeting, the Annual 4-H Dairy Conference in Madison, Wisconsin and at Agribition in Regina, Saskatchewan.

The first permanent building to be costructed at the Alberta 4-H Centre, Battle Lake, was completed at a cost of $225,000. The building contains a dining room, kitchen and assembly area. Landscaping and trail construction worth $45,000 was achieved through an Environment 2000 grant. The Recreation Parks and Wildlife Foundation provided a grant of $15,000 to develop a waterfront beach area.

Staff assisted the Alberta Rural Youth Association (ARYA) in becoming a registered society on October 24, 1984. Six regional 4-H alumni groups were active in 1984.

Scholarships valued at $14,150 were awarded to 24 4-H members. Four new scholarships were initiated by sponsors: the Gulf Canada Citizenship Study Award, Thomas Caryk Memorial (Steiger Canada), Lilydale Co-operative and Farm Credit Corporation Scholarships. The scholarships available at time of writing totalled $20,000 in value.

4-H staff liaised with district, regional, provincial and national 4-H councils. 4-H staff provided input to Prairie Farm Rehabilitation Act, National Wildlife Association, the Agriculture Education committee, Boys' and Girls' Clubs of Edmonton and Alberta Alcohol and Drug Abuse Commission. The 4-H branch drew resources from 19 government departments in its operations.

Staff continued to recognize volunteer contributions to 4-H through leader award banquets, newspaper articles, radio announcements and the presentation of leadership pins and certificates. Thirty-three leaders represented Alberta on nine leader recognition award trips. Two 4-H supporters were admitted to the 4-H Hall of Fame.

4-H staff recruited volunteer assistance to conduct judging workshops and educational tours, to act as full-time leaders and guest speakers, and to sponsor special events. 4-H staff contacted several companies who provided direct sponsorship in the form of funds, staffing, promotion and materials.

ALBERTA 4-H MEMBERSHIP BY PLACING OF RESIDENCE

	Female	Male	Total	
Farm	3385	3119	6504	(78%)
Rural Non Farm	646	307	953	
Urban	618	237	855	
TOTAL	4649	3663	8312*	

* Since sex and place of residence data had not been received for 112 members, at time of calculation, these figures were extrapolated using the ratios for the remaining 8200 4-H members.

Total number of clubs: 536
Total number of adult volunteer leaders: 2406
Average age of 4-H members: 13.15
Average tenure of 4-H members: 2.87

4-H BRANCH CLIENT CONTACTS

1. Educational/Consultative Activities Involving 4-H Clients

Topic	No. of Events	Attendance
4-H Administration	105	1255
Projects	363	17,777
Personal Development	38	1045
Communications	74	2858
Camping	49	1818
Leadership	139	2144
4-H Promotion	123	11,600
Other	85	14,322
TOTAL	976	52,819

2. Client Contacts

Office visits	2278
Telephone	17,819
Letters	6815
Mail-Outs	1388
Copies circulated	64,229

3. Media

Type	No. of Releases
Radio	481
Print	1219
Television	99

4. Major Meetings

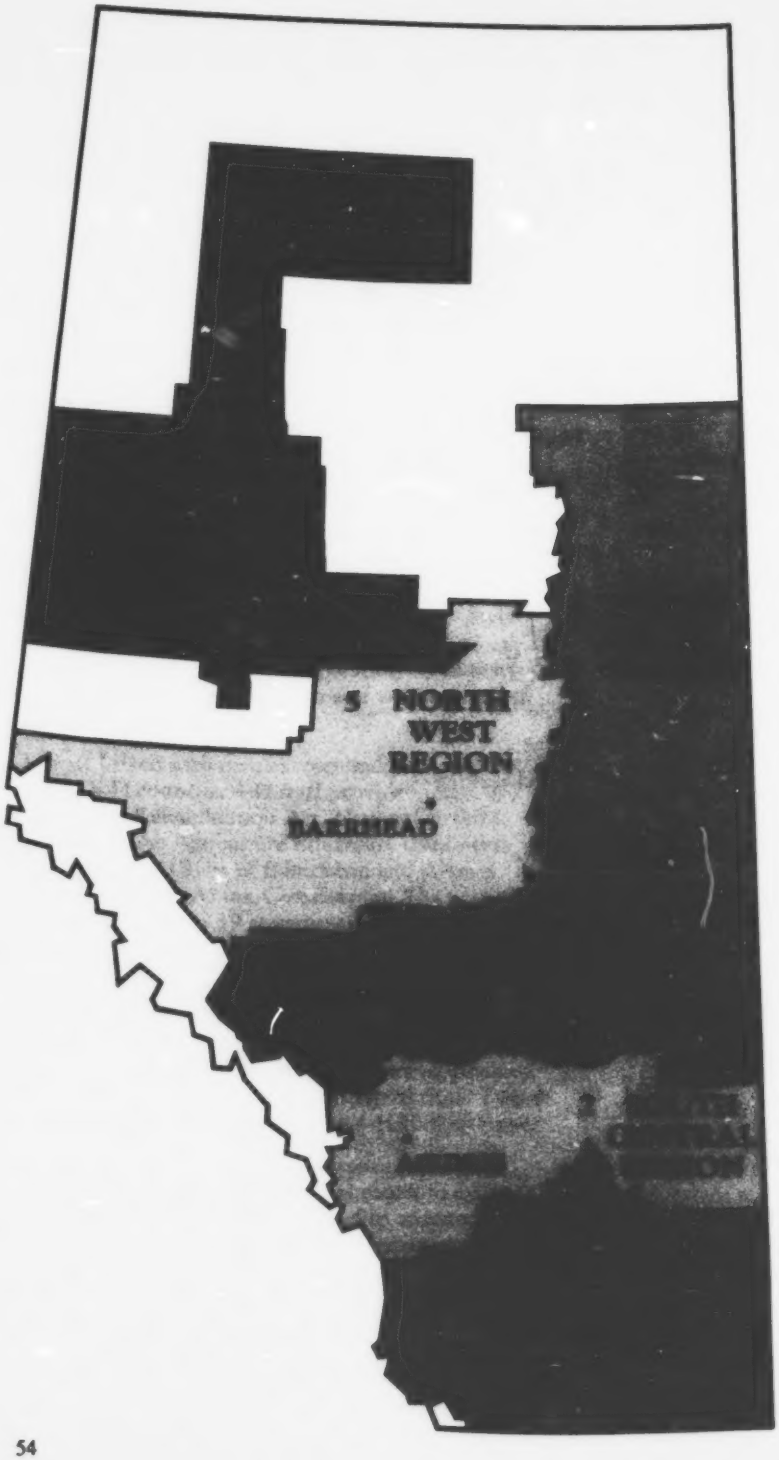
Type	No. of Meetings	Attendance
Club	32	628
District Council	127	2453
Regional Council	40	1064
Provincial Council	21	217
Project/Non-Project	40	420
Fair Boards/Agriculture Societies	49	646
Other	59	706

SUMMARY OF 4-H PROJECT ENROLMENT

Club Project	No. of Clubs
Beef	205
Canine	7
Clothing	25
Crafts	7
Dairy	16
Field Crops	1
Foods	8
Horticulture	4
Light Horse	105
Outdoorsman	1
Pheasant	1
Rabbit	1
Sheep	6
Small Engines	7
Sugar Beets	1
Swine	2
Woodworking	1
Other	5
*Multi	133
TOTAL	536

** Multi - clubs carrying 2 or more different projects*

MAP OF THE SIX ALBERTA AGRICULTURE REGIONS



REGION 1 - SOUTHERN REGION - LETHBRIDGE

The weather pattern of the previous four years continued, contributing to a very disappointing agricultural production year. While the western part of the region suffered the greatest losses, the entire region suffered a drought reminiscent of 1918. Production, even under irrigation, declined substantially.

Dryland crop yields were significantly below average. Winter wheat and summerfallow crops such as spring wheat yielded in the 15 to 25 bushel range, depending upon the area. Recropping, even though spring moisture was reasonable, resulted in yields from one or two bushels per acre to five or six. Much of the crop was so short it was not harvested.

Forage crops, particularly alfalfa, fared well under irrigation and produced the bulk of the forage produced in the region. There was little or no dryland forage produced.

Irrigated specialty crops yielded less than expected as a result of the high summer temperatures which resulted in water deficits at critical times.

Sugar beet producers experienced a difficult year, with plants blown out in the spring and very difficult harvesting conditions in the fall due to frost and snow. Several hundred acres were not harvested.

Dry ideal conditions forced several districts to contend with severe grasshopper outbreaks. Cutworm populations were higher than normal as well. Research scientists at Agriculture Canada's Lethbridge Centre were forecasting widespread outbreaks of both cutworms and grasshoppers for the spring of 1985.

Commodity prices for some special crops, such as corn, beans, lentils and sunflowers, were quite good and growers received reasonable returns despite the conditions.

Livestock producers faced enormous feed costs going into winter owing to very high hay prices. Hay was imported from as far as Peace River with prices ranging from $100 to $130 per tonne. There was not a large sell-off of breeding cows. Fewer calves were wintered over and some culling of cows took place. The beef-sheep subsidy program in this region was readily accepted.

More finished cattle and hogs were shipped to U.S. points, largely because of the U.S.-Canadian dollar exchange rate which gave producers a greater net return.

Hog producers experienced difficulties, particularly after their price support program ceased. Higher concentrate feed prices, combined with lower selling prices, have caused some dislocations in the industry. The uncertainty surrounding the domestic market encouraged a few producers to ship to the U.S. with some success.

The dairy industry maintained its relatively stable position.

Generally, 1984 was a disappointing year for producers and the infrastructure supporting agriculture. Regional economists estimated that the sum of declining production plus increased feed costs amounted to an estimated $270 million for primary producers. The reduced sales of the agribusiness and service industries were not estimated, but was significant.

Agricultural processing of special crops declined slightly. Canning corn acreage was cancelled because of high inventories. The alfalfa processing plants completed a reasonably successful year, although freight problems have been experienced. Bow Island producers commenced construction of their alfalfa dehydrating plant.

Primary producers faced increasing financial problems because of the poor production year and generally declining commodity prices. In addition, during the past 18 months most producers have sold all of their inventory. Net farm income has declined significantly.

A continuing decline of net farm income has resulted in an increasing demand by farmers for technical and production economic information and advice to assist them to maximize profits under less than desirable economic conditions.

Alberta Agriculture responded with a major emphasis on consulting on an individual farm basis, wherever possible. Interviews with farmers increased substantially to approximately 30,000. Farm visits were maintained at a high level by both district agriculturists and regional specialists, numbering more than 3,900. The major emphasis was in the areas of soil fertility, cereal crops, special crops, pest control, forages, and soil conservation. In addition, there was increased activity with beef, swine and dairy producers.

With the introduction of the department's farm financial initiatives program, consulting was introduced to farm families in addition to the normal farm management/record keeping program. Seven consultants and regional economists consulted with 39 farm families with varying degrees of success. This consulting program was closely co-ordinated with the Alberta Agricultural Development Corporation.

District and region staff, in co-operation with commodity groups and agribusiness, planned production and economic seminars, as well as financial management and record keeping courses throughout the region. In total, this region held 215 educational events with an attendance of 5,289 producers.

This year region 1 utilized its total allocated funding for on-farm demonstrations. There were demonstrations of acid fertilizers, dryland alfalfa production, controlling saline seeps, rangeland brush control and canola meal for swine.

Very close liaison with the Alberta Agricultural Development Corporation continued, particularly in the livestock production areas. Regional specialists worked closely with loans officers on many loan applications. In addition, district staff held 2,790 interviews dealing with farm management and credit.

Agricultural service boards continued their programs on weed control and warble control. Several service boards have increased their interest in soil conservation, particularly wind erosion control, and salinity control. Conservation and development branch personnel assisted regional staff in encouraging greater soil conservation emphasis.

District staff members were very active in assisting agricultural societies with their fairs and exhibitions, and other events to help improve their viability in the rural areas. They also provided support and advice to co-operative seed plant boards in these districts.

After being on hold in 1983-84, the green certificate program started the year with 18 training situations and rose to a high of 35. In addition to this, a major native training program was developed with four Bloods placed in January, and six Peigans in March.

As of March 31, 1985, there were 93 4-H clubs registered in this region. Total membership in the clubs was about 1500. Thirty-five workshops dealing with farm safety, parliamentary procedures, and new leaders' orientation were conducted throughout this region.

District and regional staff continued to use the media intensively. In total, 378 newscolumns were written and 228 radio broadcasts completed. A new concept for a newsletter, a single sheet printed on both sides and mailed every two weeks, has obtained outstanding response by the Taber office.

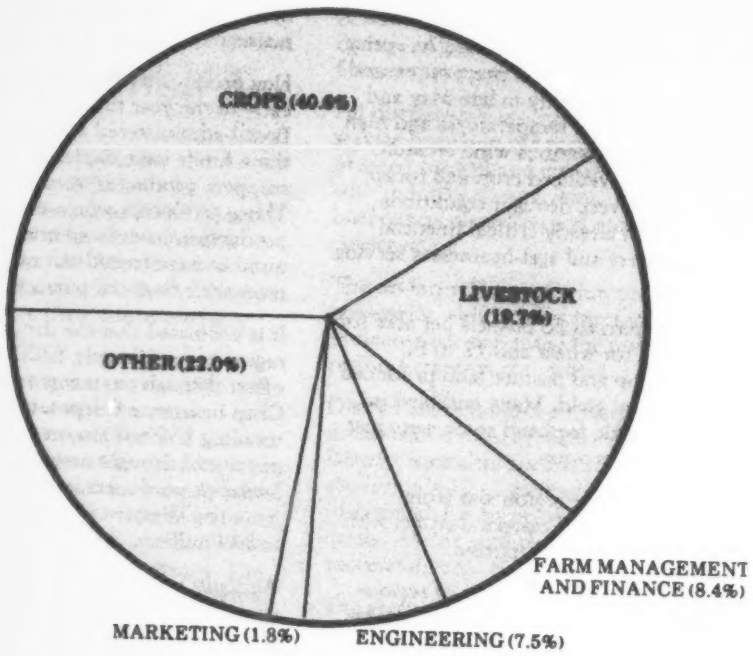
Agrivision this year adopted a new "magazine" style format which was very successful. Many district offices and regional specialists contributed to the production of 30 one-half hour shows. Staff also participated in 53 other television events.

Ag-Expo '85 held in March maintained its past level of success. This was the first year of the international seed fair and over 100 entries from outside of Canada were received. The region's staff presented several seminars with the highlight of the exposition being a soil fertility seminar with an attendance in excess of 400 people. Approximately 85,000 people visited the four-day event.

NUMBER OF CLIENT CONTACTS

Office interviews	30,009
Telephone calls	40,477
Farm visits	3,911
Educational events	215
Attended by	5,289

Client Contacts by Subject Area



REGION 1 - SOUTHERN REGION

REGION 2 - SOUTH CENTRAL REGION - AIRDRIE

1984 was a continuation of a series of years for the region with below normal rain and snowfall. The spring was early, warm and ideal for seed bed preparation and seeding but deteriorated very quickly in late May and through June with above normal temperatures and high winds. The resulting situation: serious wind erosion, depleted water supplies, and reduced crop and forage yields under moderate to severe drought conditions which added pressure to an already critical financial position for many producers and agri-businesses serving them.

Crop yields ranged from zero to 20 bushels per acre for canola, five to 30 bushels for wheat and 12 to 60 bushes for barley. Hay crop and pasture land produced 40 to 60 per cent of normal yield. Many stubbled in crops were cut early for cattle feed and some were just left as cover to prevent soil erosion.

The major insect concern in the region was from grasshoppers in the southern and eastern districts with more than one spraying to control reported.

Cattle and sheep producers suffered a year of serious set-back from the drought as feed and water shortages developed over the western half and southeast areas of the region by late July. As a result, the federal and provincial governments implemented a drought assistance grant payment to producers based on their breeding herd at the end of March, 1985 to provide relief from the high cost of feed and to encourage retention of the beef, dairy and sheep base production unit on farm. The feed manufacturing industry in the region benefited from the feed shortage and poor quality hay. Cattle rations and pelleted range supplement sales increased dramatically.

Through the co-operation of district agriculturists and specialists in the Fairview, Barrhead and Vermilion regions, lists of producers with hay supplies for sale were gathered and consolidated for distribution. The district agriculturists in region 2 published the lists extensively allowing farmers to arrange purchase of needed hay. The lists were also provided to cattle commissions, cattle feeders associations and all feed company offices to make it as convenient as possible for all producers and feeders to contact hay sellers. This service became more useful as the winter progressed. Although hay supplies started moving into the region in September, the bulk of it moved after the first cold spell through to the end of March.

Despite higher feed costs and drought-related problems, most poultry producers and dairymen faired much better than other livestock producers. They were able to maintain a reasonable gross margin.

Hog producers managed to secure reasonable returns early in the year through the Alberta Hog Marketing Board-administered stop-loss insurance program. When these funds were depleted in the fall and payments stopped, producers' returns dropped below full cost. Those producers who were late entrants into hog production have faced critical financial situations and a number were forced out of business when they couldn't meet their financial commitments.

It is estimated that the drought cost producers in the region approximately $200 million. This was partially offset through payments from the Alberta Hail and Crop Insurance Corporation (basic crop claims) totalling $59 million on 3,097 claims; from the federal-provincial drought assistance program to 4,493 livestock producers in the amount of $12 million; and from the Western Grain Stabilization Fund, estimated at $34 million.

Agricultural service boards and district agriculturists encouraged farmers to adopt recommended measures to control soil erosion by wind. This was followed by educational programs in all districts to have producers change farm practices wherever possible to aid in soil conservation.

The department's livestock water pumping program was started in early spring and operated until freeze-up with over 100 dug-outs filled at least once.

District agriculturists dealt with 10,037 office interviews, phone calls and farm visits with farmers to discuss crop and forage related questions. Fifty education programs on soil management and crop production practices were carried out with 1,965 producers attending.

As farmers experienced a worsening financial position from both drought and low market prices combined with high input costs, the region's staff members stepped up their service to deal with direct financial concerns. Economic data were included with production recommendations, staff assisted with preparations of up-dated cash flow statements and encouraged producers to establish closer contact and understanding with lenders. District agriculturists noted increased producer referrals by lenders for input on production programs and alternatives where financial problems were evident.

During the year, the number of land transactions continued to decline and prices fell. This further eroded borrowers' equity rating with lenders, bringing more pressure on many producers who couldn't meet commitments.

Activity through Agricultural Development Corporation offices in the region included 159 beginning farmer loans in the amount of $20,570 and 57 other types of loans. Farmer enquiries increased toward the end of the year when the farm financial initiatives program was announced that allowed farmers to borrow operating loans from their lender under a guarantee from the corporation.

The farm financial initiatives program to provide training and counsel to producers with financial problems was introduced in January. It enabled the region to hire farmer consultants on a per diem basis to conduct in-depth reviews and analyses for farmers who requested the service to determine the best alternative available to resolve their situation with a lender. Twenty farmers were given counselling by the consultants. The region's district agriculturists and specialists counselled another 30.

District agriculturists, with specialist support, responded to an increased demand from producers for advice on handling drought-stressed crops, formulating livestock least-cost rations that would maintain performance, a wide range of financial-related concerns, and alternative management practices or technology to implement to help cope with reduced margins of profit.

The region's district agriculturists reported the following level of contacts with producers and industry in the district offices: office interviews - 17,904; telephone calls - 23,851; farm visits - 1,760 (678 first time); and 218 educational programs which were attended by 5,094 producers for a total of 48,609 contacts.

A full range of courses was offered including production, financial management, marketing, soil conservation and skills training. Co-operation with farm organizations, industry professionals and local business staff was emphasized by regional and district staff whenever common objectives of benefit to producers could be identified.

District staff increased use of radio and local newspapers to get topical and seasonal information out to producers. One hundred and sixty radio broadcasts were conducted and 374 newscolumns and newsletters were published.

A refined farm accounting manual was produced and district crop production cost analyses were up-dated for farmers' use.

All district staff co-operated with the agricultural service boards in the region. Localized demonstrations of weed control and cultural practice were expanded with industry co-operation. Increased emphasis by the boards was placed on soil erosion control and conservation.

The on-farm demonstration program expanded as its popularity with farmers increased. Twenty-seven projects were presented for review and decision by the region's research committee.

District staff continued to support agricultural societies in the region to help ensure their objectives were met. District agriculturists attended the board meetings of the region's 12 co-operative seed cleaning plants to provide advice on plant up-grading and address other needs. All the seed cleaning plants reported a generally successful year.

The green certificate farm training program, while facing a difficult year, had 26 trainees tested. Eighteen passed their Level I tests and six passed their Level II tests for an 80 per cent success rate. An additional seven trainees continued to work on-farm toward their level III certificates. Over 60 per cent of the trainees who have gone through the program and obtained their certificates continued to either be employed in agriculture on farms or with industry, or own their own farms. Training farmers continued to actively support this program.

Local fair boards and other community organizations utilized the services of district office staff for agricultural shows, fairs and other community events to help them meet objectives.

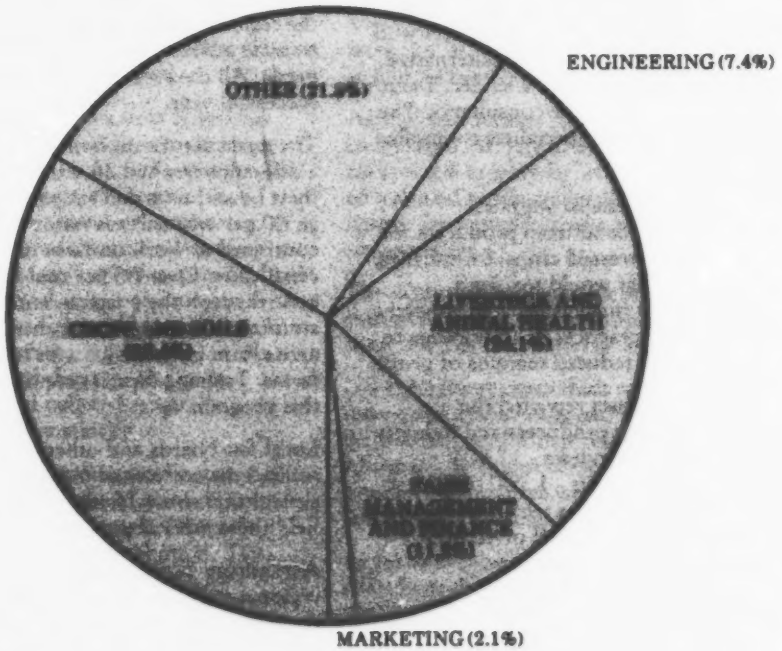
Agriculture Week was supported by district office and regional staff through speaking engagements and events designed to promote agriculture and the benefits that accrue to Albertans because of agriculture. Staff also co-operated with Agaware where possible.

There were 81 clubs under the 4-H program in the region with 1290 active members. Ongoing activities in this program included public speaking, leadership training, working seminars, summer and winter camp and various project-related competitions. The region's 4-H On Parade, which is co-sponsored by Alberta

Agriculture and the Calgary Exhibition and Stampede Board, was carried out over a three-day period in June. It involved over 600 members from 40 different clubs in the region. Leadership training and a leadership recognition event in mid-January over a three-day weekend attracted 200 leaders and continued to be a highlight of the 4-H program in the region.

NUMBER OF CLIENT CONTACTS	
Office interviews	17,904
Telephone calls	23,851
Farm visits	1,760
Educational events	218
Attended by	5,094

Client Contacts by Subject Area



REGION 2 - SOUTH CENTRAL REGION

REGION 3 - NORTH CENTRAL REGION - RED DEER

Annual precipitation during the growing season was extremely erratic. In general, the counties of Camrose, Wetaskiwin, Ponoka and Lacombe were slightly below normal. The remainder of the region experienced serious drought during July and August resulting in heat stress, low yields with some crops plowed under and serious hay and pasture shortages. The hay listing service was very popular.

Most severe crop losses were east of highway #21, south of highway #12 and I.D. #10. Uneven forage yields resulted in major hay shortages in southern portions of region. Pastures were severely overgrazed leading to potential problems in 1985.

Cereal and canola yields ranged widely with the better crops still being only average. There was very little second cut hay. The quality of most hay was above average. Canola acreage increased in 1984. Winter wheat crops did well despite the drought. The acreage of winter wheat seeded in the fall of 1984 increased 10-fold.

Weed control was normal although the infestation levels of the perennial weeds, quackgrass and scentless chamomile, increased. The demand for aerial herbicide applications exceeded custom capacity.

Insects were not a major hazard to crop production in 1984, although some districts did spray for grasshoppers. Canola root maggots were widespread in northern parts of the region. Flea beetles and cutworms caused isolated concerns.

The lower than normal crop yields created financial hardships for many farmers in the region, compounded by the cash flow problems of previous years.

Barley prices remained fairly constant and market opportunities were good. Increasing canola prices and quotas helped. Unfortunately, most producers could only take partial advantage of these opportunities because of yield reductions. Input costs continued to rise putting further stress on cash flows.

The fall rains and early winter snows helped ease the moisture shortage but allowed for little fieldwork. The fall of 1984 saw little herbicide and fertilizer application.

Calf prices in the fall of 1984 were up from the previous year, many selling in the $90 to $100 range. Feed shortages and cash flow problems precipitated a significant sell down of the cow herd. With high calf prices and high input costs, many feedlots were in tight financial straits with some going bankrupt.

The ending of the Pork Producers' Market Insurance Plan resulted in drastic price declines, in many cases well below farmers' cash costs. Declining earnings, continued cost increases and relatively high interest rates made it difficult for hog producers. An increasing number of producers experienced severe financial problems and many went out of the hog business.

The dairy industry stabilized somewhat in 1984. The region saw approximately 40 producers go out of business but the vast majority of the remainder remained stable.

1984 widened the gap between those farmers with substantial debt and those without. Many of the young farmers were in the former category and thus faced severe financial problems. Similarly those farmers that expanded significantly in the previous few years also experienced difficulty. Lenders reported that five per cent of farmers faced bankruptcy and a further 10 to 15 per cent faced serious financial difficulty. The remainder remained sound. The farm bankruptcy rate increased substantially in 1984.

Agricultural service industries and equipment dealers experienced declining sales. Several machinery dealers drastically cut back operations or closed. Feed mills remained reasonably stable.

Agricultural processing industries continued to operate normally. Fletchers' Fine Foods expanded their hog kill facilities to a point that they have the ability to handle nearly all of Alberta's hog kill. The custom fertilizer and chemical applicating industry had increased sales.

The number of clients contacted by the Agricultural Development Corporation was up significantly during 1984. The number of people getting loans did not change too much but the number seeking financial counselling increased significantly. This was also the case with requests directed toward district agriculturists. Approximately 500 financial counselling sessions were carried out by district agriculturists and the consultants employed under the financial initiatives program. District staff significantly increased liaison with local bankers.

Lenders reported a major increase in debt consolidation and a reduction in loans for new assets. Real estate prices dropped up to 50 per cent in some areas with very little farm land moving. Availability of land for leasing increased in 1984.

District staff conducted 21,000 office interviews and responded to 30,000 phone calls. These contacts sought a wide range of production, management and marketing information. Staff conducted 2,983 farm visits.

In total 464 educational courses, demonstrations and tours were conducted, attended by 33,470 producers. Information disseminated covered production, financial management, marketing and skill training. There was a major increase in farm and financial management content at seminars. Regional programs included success through farm management, beef marketing, grain marketing, and pasture management. The latter was a joint venture with local forage association. Several districts conducted joint seminars with the Alberta Canola Growers, the Western Barley Growers and the Alberta Cattle Commission.

Publications developed by the region included a series of factsheets entitled *Success Through Farm Management* and updating of several production cost budgets.

Several district and regional staff members continued to be heavily involved in demonstrations and field-applied research projects. Work with agricultural service boards and forage associations in this regard was expanded in 1984. More than 60 demonstrations were conducted with help from the above-mentioned agencies and the on-farm demonstration program.

The upgrading of intensive livestock facilities continued. There was a drop in new construction in 1984. Numerous requests were directed to the regional engineering staff for information on functional and structural designs of intensive livestock buildings, troubleshooting livestock environments, water supply systems and grain handling/drying systems.

Although interest has decreased, district agriculturists continued to provide input into the subdivision process and location of intensive livestock facilities.

District staff members attended 595 meetings as a result of their involvement with agricultural societies, seed cleaning plants, rural crime watch, agricultural development committees, forage associations, 4-H clubs and agricultural service boards. In total 10 service boards were active in the region.

With the reopening of the green certificate program, 40 trainers became active by the end of 1984 with 45 trainees being certified at Levels I and II combined. Staff provided numerous consultations on farm labor in addition to the green certificate program.

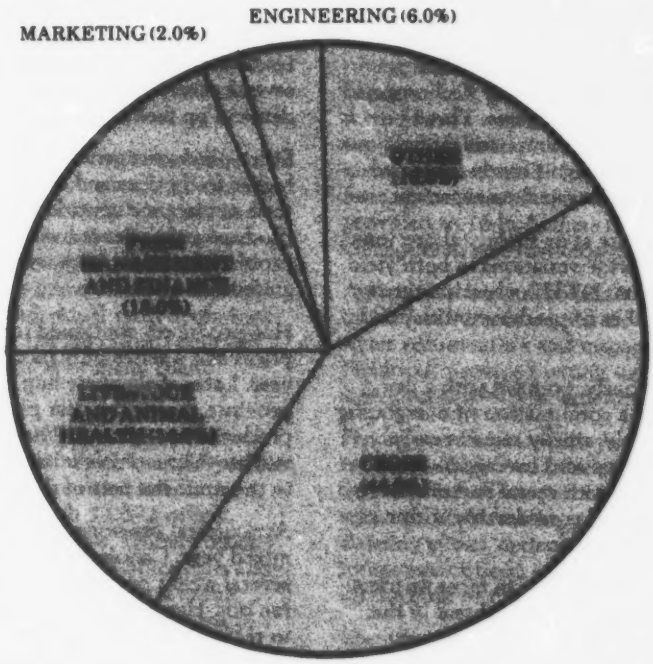
1984 saw 84 4-H clubs active in region 3 with a total membership of 1,300. Multi project, beef and light horse clubs continued to be the most popular.

During Agriculture Week several districts participated in numerous school, shopping mall and evening dinner activities.

NUMBER OF CLIENT CONTACTS

Office interviews	21,000
Telephone calls	30,000
Farm visits	2,983
Educational events	464
Attended by	33,470

Client Contacts by Subject Area



REGION 3 - CENTRAL REGION

REGION 4 - NORTHEAST REGION - VERMILION

The financial situation of agriculture continued to be the major concern of farm people over the past year. Declining interest rates provided some relief but increases in some input costs and static or declining product prices more than offset any gains. These concerns plus a planned increased emphasis by field services staff in region 4 led to significantly increased interest in all aspects of farm financial management.

Crop yields in the region were at or slightly above long term averages. There were wide variations in both yield and quality across the region. HY320 wheat was grown for the first time by a number of producers with good to excellent results.

A series of dry years previously, coupled with a dry spring in 1984, resulted in a continuation of overgrazing on most pastures. Conversely, timely rains in early summer in many districts produced average to much above average hay yields. As with cereal and oilseed crops, yields and quality varied considerably within districts as well as across the region.

Insect problems were relatively minor in most districts. Grasshoppers were a potentially serious threat in the southeast corner of the region but damage was not widespread. Forest tent caterpillars continued to be a problem across the region with extensive areas of native poplar as well as many farm shelterbelts totally defoliated.

The onset of winter on October 15, 1984, with a heavy snowfall left a small amount of unharvested crop on the ground. More importantly, however, almost no straw was put up in the region. This left many livestock producers seriously short of bedding and some winter feed.

Weed control was an increasing concern in most districts as the amount of summerfallow continued to decrease. Perennial weeds such as Canada thistle, couch grass and toad flax were a serious problem for many producers involved in continuous cropping. Interest in comprehensive weed control programs was greater during the year as producers recognized the need to develop longer term plans for weed control.

Soil salinity increased as a problem in many districts during the year - mainly because of a cycle of below average rainfall years. The problem was especially serious on solonetzic soils and fields that are regularly summerfallowed. Interest in methods to deal with salinity increased substantially during the year.

Livestock producers experienced another difficult year with static or decreased prices and higher feed costs - especially barley, hay and straw. The feeding period for cattle started four to six weeks earlier than usual as a result of the heavy snowfall in mid-October. As well, several severe cold spells during the winter put a heavier demand on feed supplies.

Dairy producers generally had a good year although higher feed prices and the long cold winter reduced their net income considerably. A number of developing producers experienced varying levels of cash flow problems - mainly because of a less-than-adequate amount of quota.

Hog producers continued to struggle with relatively low prices and a series of marketing problems during the year. Lack of adequate hog processing capacity in the province during the year put extra pressure on producers in region 4. They had fewer opportunities to market their animals outside of Alberta than producers in the southern part of the province.

Agricultural processing industries in region 4 had a mixed year. Canola crushing plants were shut down for several weeks during the summer after canola supplies ran out. Harvesting of the new crop allowed the plants to reopen. With considerable encouragement from the plants, seed deliveries remained fairly steady during the winter, allowing the plants to operate in a normal routine. Local abattoirs and meat processing plants generally had an excellent year. Many plants had significant increases in volume. Plans were started for several expansions and one or two new plants.

Agricultural service firms felt the effect of reduced net farm income. Sales of new farm equipment declined. Requests for dealer credit increased substantially. Some firms restricted credit sales severely while a few began to operate on a cash-on-delivery basis only. The farm machinery sector was strongly affected by the financial problems of International Harvester and White Farm Equipment. Farmers were seriously concerned about the future availability of parts and service on equipment from these companies. The merger of International Harvester and Case significantly reduced the number of machinery dealers in the region.

Fertilizer dealers were hard hit by the early winter with less than 10 per cent of the normal fall fertilizer application completed. Many had to carry large inventories over the winter.

Many producers experienced varying degrees of financial and credit problems during the year. Most of these resulted from an inability to repay operating loans and a general tightening up of credit availability by

lenders. A continuation of problems from previous years led some producers to substantially reduce their farm operation or to go out of business. Others were able to recognize the seriousness of their situation in time and take action to resolve their problems.

Field services staff were challenged by the problems and difficulties experienced by producers and responded with an increased emphasis on remedial services and assistance. Involvement in the broad area of farm financial management increased. Many field staff became more involved in providing intensive indepth counselling and analysis to individual farm operations. Financial considerations and the net dollar result of farming decisions were the focus of many client contacts.

During the year district agriculturists in the northeast region made 2,534 farm visits of which over 25 per cent were to new clients. They also provided information and service to farm clients through 17,872 office interviews and 31,917 telephone calls. District office secretaries assisted with another 5,333 office calls and 6025 telephone calls. Agriculture specialists in the Vermilion regional office also provided assistance to a large number of farm clients. Most of these contacts resulted from referrals from district staff and agribusiness.

As agricultural extension specialists, district agriculturists in region 4, in co-operation with producer groups, agribusinesses and local community associations, planned and delivered 346 meetings, courses and tours to a total of 11,114 farmers. The areas that were emphasized included crop production, livestock production, farm financial management, engineering, marketing and credit/finance.

In addition to personal contact, meetings and courses, district agriculturists made extensive use of mass media to extend agricultural technology and information. They produced a total of 564 newscolumns and 529 newsletters. Also, 229 radio and nine television presentations were made.

The on-farm demonstration program continued to be a popular and useful means to demonstrate new technology and test research results for local applicability. Subject areas for projects during the year included wild rice production, livestock fencing, rotational grazing, liming of soils and market gardening techniques.

The tight financial situation faced by most farmers during the year resulted in an increased interest in fine tuning individual farm enterprises. Many producers began to look more closely at alternate marketing methods as a way to improve their income levels. In support of these areas, district agriculturists provided assistance through 4316 interviews, telephone calls and farm visits. As well, 63 educational events were provided to 1646 farmers on farm business management and marketing.

Agricultural service boards in region 4 continued to take a leading role in overall weed control, soil and water conservation and management, and insect control. Field staff provided strong support and guidance to the agricultural service boards throughout the year.

Producer and community associations and organizations received a high level of support from district agriculturists. They participated in 600 advisory and administrative meetings. Agricultural societies, seed cleaning plants, agricultural development committees, forage associations and livestock producer groups made up the bulk of these meetings.

Co-operative activities between field services staff and Agricultural Development Corporation staff in region 4 increased considerably during the year. District agriculturists and regional specialists assisted with many loan application reviews and situations involving severe financial difficulties. Development of complementary farm financial counselling programs by Alberta Agriculture and ADC late in the year involved DAs and loans officers in a large number of client contacts. Most involved producers in moderate to severe financial distress.

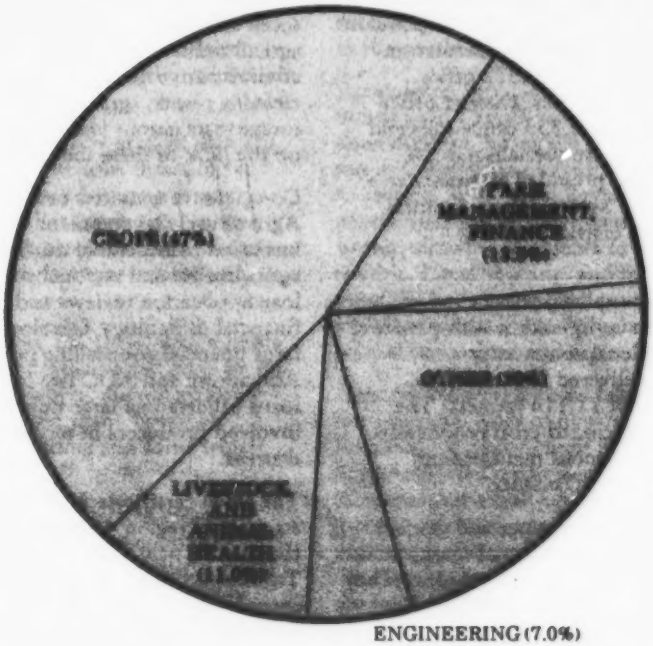
The green certificate farm training program operated strongly in region 4 during the 1984-85 year. During the year 70 new training situations were established. Trainees achieved 37 Level I and 15 Level II certificates through the program. Another eight trainees were working on their Level III certificates. Regional farm training specialists also provided a high level of assistance to farmers on a wide variety of farm training, labor relations and labor management topics. Farmers in region 4 continued to be very supportive of the green certificate training program.

The 4-H program remained stable during the year with 72 clubs in the region and 1054 active members. Beef continued to be the most popular, with 38 clubs and 784 members. There were 13 light horse and multi-project clubs. Others included clothing, computer, foods, canine and sheep.

NUMBER OF CLIENT CONTACTS

Office interviews	23,205
Telephone calls	37,942
Farm visits	2,534
Educational events	346
Attended by	11,114

Client Contacts by Subject Area



REGION 4 - NORTHEAST REGION

REGION 5 - NORTHWEST REGION - BARRHEAD

An early spring occurred in 1984, as below average snowfall and a quick melt allowed field tillage to commence in early to mid-April. Some producers were seeding by the end of April and seeding was general throughout the region by the first week in May. The early start was offset by cool weather that kept soil temperatures low, thus delaying germination.

Total precipitation during the 1984 cropping season ranged from normal to 20 per cent above normal. However, its erratic distribution caused periods of stress especially in forage crops, and in some districts to annual crops as well.

The total regional yield of grain and oilseed crops was about five to eight per cent higher than 1983, in spite of premature ripening in some districts. Forage production on a per acre basis was lower than expected, considering the excellent start crops got in the early spring. However, an overall regional surplus of 75,000 tonnes resulted, due to the very large acreage seeded into forages, plus the fact that very little winter kill occurred during the preceding two winters.

Quality of first cut hay crops was excellent as much of it was baled without a rain. Second cut hay crops, although greater in average yield, were baled in poorer than normal condition because of later rains. A very active hay market was evident throughout the winter and most of this region's surplus was shipped to southern Alberta.

A major hail storm/tornado occurred on June 29th, starting in the Drayton Valley area and progressing northward to Athabasca. Annual crop damage was light considering the severity of the storm, since most crops were at an early enough stage to recover. Forages however were more seriously affected, and on a few farms serious damage occurred to farmsteads.

A few fields were sprayed for Bertha armyworms and the odd field of sclerotinia in canola was reported. Generally speaking though, insect problems and diseases were not a major hazard to crop production in 1984. There was, however, a much higher number of herbicide crop tolerance complaints.

An extremely early snowfall on October 15th, that stayed, ended harvest and any fall fertilizer and/or chemical application. Similarly, fall tillage came to a halt as temperatures dropped to -28°C by month's end. Approximately five to seven per cent of the seeded acres in the region were not harvested, the majority being in the northern districts. The early snowfall halted fall grazing of pastures and harvested crop land, and extended the winter feeding period by three to four weeks. It also restricted the baling of straw, the result being a serious shortage throughout the winter.

Marketing opportunities for cereals and oilseeds were good throughout the winter of 1984-85. Although prices remained fairly low, quotas were good and grain and oilseed producers had a relatively good cash flow. In addition, cash payments were received from the Western Grain Stabilization Fund.

The most significant negative factor in 1984-85 occurred in the hog industry, with prices being low throughout the year. These low market prices brought the Pork Producers' Market Insurance Plan into a deficit position and caused a premature end to the plan in December of 1984.

Calf prices were very similar in the fall of 1984 to those of the previous two years, being in the range of 80 cents to 95 cents per pound. The dairy industry had its problems as well in 1984. Lack of quota and high investment costs continued to plague producers. Generally speaking, livestock producers throughout the region continued to face cash flow problems. Continually rising input costs had all producers concerned, and debt servicing was a major problem for those farms with greater than a 50 per cent debt-to-asset ratio.

Numerous consultations with individual farmers were made regarding financial management, and production economics was stressed in all extension activities. Crop production cost studies were continued for the second year in 1984. As well, production cost data on cow-calf enterprises were also collected. The results generated useful information for producers and staff alike, in terms of helping with management decisions.

In January of 1985 a financial counselling program was initiated by Alberta Agriculture. In the northwest region, 11 consultants (all active producers) were contracted to provide individual counselling to other producers who were in financial difficulty. These consultants augmented the efforts of district and regional staff in this subject area, and provided detailed counselling to 16 of their peers.

During 1984-85 district staff conducted 18,343 office interviews and responded to 27,603 telephone calls. These contacts covered a wide range of production, management and marketing enquiries. Similarly, 4,074 farm calls were conducted in these areas. District staff members attended 574 meetings as a result of their involvement with agricultural fairs, seed cleaning plants,

rural crime watch groups, agricultural development committees, further education councils, 4-H clubs and agricultural service boards.

In total, 366 educational courses, demonstrations and tours were conducted, attended by 10,786 producers. A full spectrum of production areas, financial management, marketing and skill training was covered. Regional programs included "Protecting Your Farm Investment", the "Alberta Grazing Symposium", a jointly sponsored canola production seminar and two jointly sponsored barley production seminars. The latter two were planned and executed in co-operation with the Alberta Canola Growers' Association and the Western Barley Growers' Association. Six smaller regional programs were jointly sponsored with the Alberta Cattle Commission and the Alberta Pork Producers' Marketing Board. A bankers' seminar was also conducted, the purpose being to update lenders on certain key production and management issues, as related to lending to livestock enterprises.

Several district and regional staff members continued to be heavily involved in demonstrations and field-applied research projects. Work with agricultural service boards and forage associations in this regard was expanded in 1984. The on-farm demonstration program continued to be extremely popular and 27 projects were submitted for review. The majority was in the areas of pasture and forage management in accordance with this region's needs.

Requests for information on new livestock facilities were down about 40 per cent from 1983-84. The number of requests for assistance on ventilation problems and renovations was about the same as last year. There was a slight increase in interest in small swine facilities but very little interest shown in beef facilities. Dairy and poultry requests were the same as last year.

The total number of Agricultural Development Corporation loan submissions in 1984-85 was 197. This was down slightly from the previous year (201). Of these total submissions, 160 were direct loans and 37 were specific guarantees. The average loan submission remained unchanged at $145,000. Collection activity and developing workout plans continued to be a major activity for ADC staff.

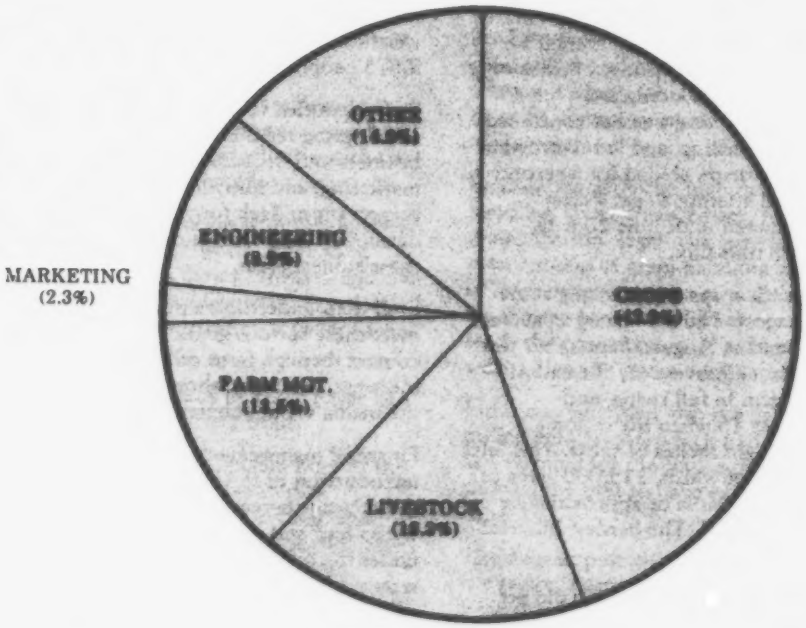
Activity in the green certificate farm training program was brisk during 1984-85, as the program operated at full quota. At the close of the fiscal year there were 37 trainees on farms. Twenty-two Level I certificates and six Level II certificates were issued. As last year, 62 per cent of the trainees who left the program continued farming.

The number of 4-H clubs in the region remained unchanged at 114. Total membership was 1,684 which was a decrease of about 15 per cent from last year. The most popular projects in the region were beef, food, light horse and clothing. Several clubs, members, volunteers and district staff participated in a major shopping mall promotion at St. Albert during Agriculture Week. This was the third year in a row that such an event was scheduled in a major urban shopping mall. As in past years, the response was very favorable.

NUMBER OF CLIENT CONTACTS

Office interviews	18,413
Telephone calls	27,603
Farm visits	4,084
Educational events	366
Attended by	10,786

Client Contacts by Subject Area



REGION 5 - NORTHWEST REGION

REGION 6 - PEACE RIVER REGION - FAIRVIEW

The 1984-85 year was difficult for farmers in the Peace region. The spring started out early and seeding proceeded well until the weekend of May 18th. The region received very heavy rains of up to six inches over a three-day period. This caused flooding and widespread erosion. The cool rainy weather continued for a month which delayed seeding, and led to crusting problems. In some areas, farmers seeded for a second and even a third time in an attempt to get a crop established. Seeding continued until June 20 with spraying dragging on until mid-July.

The summer was good with crops experiencing some drought stress during August. The harvest of an average crop commenced at the end of August. September was cool and rainy which delayed harvest. By the end of September harvest was again in full swing, and continued on until October 15 when the region received between six and eight inches of snow. This left an estimated 256,000 acres of wheat, 215,000 acres of barley and 130,000 acres of canola or approximately 30 per cent of the crop unharvested. The hardest hit areas were in the western part of the region.

Grain marketing opportunities for those who did get their crop in the bin were excellent. The drought in the southern prairies meant quotas were generous and cars were in plentiful supply. Canola producers in the region were concerned when the NARP Plant at Sexsmith closed down for six weeks in December and January for lack of seed supply. Producer concern centred on the financial stability of the plant. Those fears were alleviated when the provincial government guaranteed the operation of the plant until July 31, 1987.

1984 was an excellent year for forage production in the region. Producers went into the fall with some surplus hay from 1983 and with an excellent crop from 1984. The first listing of hay for sale in November produced over 100,000 tonnes. Very little hay moved until January and then large quantities were moved to southern Alberta with prices ranging upwards of $40 per ton. By the end of the winter approximately 95 per cent of available supplies had been sold and moved out of the region.

Beef cattle producers experienced a relatively good year: the spring calf crop was above average, summer pastures gave good gains, and prices in the fall were slightly higher than average. The early snow on October 15 necessitated an extra full month of feeding. The prolonged cold placed an additional drain on feed supplies. Some farmers, based on fall estimates, sold surplus hay, but by late winter needed to buy hay to see them through till spring.

During 1984-85 client contacts were as follows: office interviews - 19,061; telephone calls - 25,299; farm visits - 2,642; courses and programs - 377 attended by 9,673 people.

Staff identified four major areas of emphasis at the 1984 spring regional conference. These were farm business and financial management, crop production, marketing, and nutrition education and food preservation. Task force committees were set up and developed long-term and short-term goals for each of these subject areas.

Staff then undertook a number of extension activities to meet these various goals. These included one-on-one contact through farm calls, office visits, and phone calls; meetings, seminars, short courses and tours; and use of the media via newsletters, newspapers and radio.

Financial management was the major emphasis with the introduction of the farm financial management initiatives program. A co-ordinator and five consultants were hired and completed consultations with 20 clients under the program by year end. Another 40 clients were counselled by DAs and specialist staff.

Record keeping courses were held throughout the region along with seminars on analysing the health of the farm business. With more and more use being made of micro computers additional emphasis has been placed on training, both for staff and the farming public, and on developing and adapting programs.

In the soils area there were three main areas of emphasis: soils extension, soils programs and research and demonstration. Soil management programs, including preventative and remedial erosion control, were aimed at producers and other representatives of government and industry.

A major soil fertility conference was co-sponsored by the Eaglesham and Spirit River district offices and private industry and drew 105 producers to Wanham.

Region 6 lead the province in the utilization of funding and expertise available under the soil conservation area program (SCAP) and farmland development and reclamation program (FDRP). By the end of March 1985, there were 144 SCAP and 20 FDRP projects initiated within the region.

A great deal of research and demonstration work took place in soils. These included subsoil ripping and liming, fertility trials and long-term lime demonstration sites set up in co-operation with Agriculture Canada's research station at Beaverlodge.

In crop production, activities centred around four main areas: perennial weed control, canola production, improving seed quality, crop varieties and agronomics with the emphasis on wheat.

In weed control, major emphasis was placed on combating the region's number one perennial weed, Canada thistle. This was done in co-operation with the DAs and local agriculture service boards.

Emphasis was placed on co-operation with commodity groups in the winter extension program. Four joint courses were run with Western Barley Growers and five were run with the Alberta Canola Growers. A major producer survey on wheat production was designed and conducted.

The local agricultural service boards in Peace River and in Valleyview supported major variety trials.

Seed plant inspections found that all plants were of top quality, but that more work was needed in the assessment of seed quality. To this end, several training courses were established jointly by Alberta Agriculture with Fairview College for training operators and agricultural fieldmen in seed cleaning technology and in seed plant inspection.

In livestock, one of the major activities was to create awareness of the opportunities for beef production. Distance to market and lack of marketing facilities have long been a problem for cattlemen in the Peace. The Peace Country Cattle Sales Association was formed in High Prairie to sponsor fall sales throughout the region. A great deal of work was done in the Fairview district in management and facility design.

The sheep industry declined slowly, primarily because of increasing costs for production and shipping which, in turn, means lower returns to the producer. The Peace River Lamb Association worked to lessen the declining numbers.

The hog industry has grown slightly over the past year. The demise of the Pork Producers' Market Insurance Plan and the "hog wars" put a damper on increasing production.

The work of the regional dairy specialist was divided between a regulatory and trouble-shooting role, and extension. One hundred sixty-two inspections were made on plants, drivers and producers during which any problems encountered with facilities and methods of handling milk were corrected.

Dairy producers set up their own education committee and developed courses in nutrition, haying in the rain, bookkeeping and a cattle trimming and judging field day. The dairy homestudy course was run in the region and a workshop was held covering quota calculation, dairy herd improvement and farm financial management.

Engineering activities included seminars in grain handling, trash management, fertilizer placement and grain aeration. Input was provided into the design and construction of grain handling systems, and a number of livestock structures, as well as resolving farm machinery problems. Eleven workshops were held to teach the construction of grain temperature monitors with 121 participants completing their project.

Input was provided into the development of a bee pollen dehydrator, which had been originally proposed as a farming for the future project. Preliminary results showed the unit to have excellent design and ample capacity.

The dugout pumping program was again a major part of the region's activities. In the Peace region 110 dugouts were pumped. The program ran smoothly with eight trailers and six pumps being spotted throughout the region. During the winter a complete overhaul of the pumps and trailers was undertaken. A number of seminars on water analysis and dugout maintenance were presented. A major demonstration on a chlorination filtration system to remove iron was established and successfully run over the winter.

The green certificate program had a fairly stable year in 1984-85. Nine training situations continued over the winter with three crop trainees returning to their farms this spring. The success rate for trainees attending testing has improved. Fifteen tests were successfully completed with nine certificates awarded. The withdrawal of federal funds affected some training situations. All new contracts were being funded through the Alberta training program.

The regional crops laboratory in Fairview provided diagnostic and extension services to the Peace region. The lab received and dealt with 227 disease specimens and 122 insect specimens.

A field survey of canola fields showed root rot and alternaria blackspot to be the most widespread diseases occurring in 88 and 93 per cent of the surveyed fields respectively. Sclerotinia stem rot was found in 57 per

cent of the fields and tended to be low in severity. The virulent form of blackleg of canola has not been found in the Peace region and a major awareness campaign has been developed to warn farmers of the potential threat the disease poses.

The Alberta Agricultural Development Corporation (ADC) had a busy year with 256 loans being submitted, the average loan being $114,720. Of these, the vast majority were made under the beginning farmer program (209). At year's end ADC had a total loan portfolio in region 6 of 1,449 loans having a value of $125,846,382.36. ADC was also involved in the farm financial initiatives program. To date 17 loan submissions under the farm development guarantee have been made with a total value of $651,600. In addition, enterprise counsellors have been assigned to 38 clients requesting assistance.

4-H club numbers reached a total of 47, while membership was down slightly to 724 members. A junior leader workshop drew 25 participants. The regional summer camp for junior members was attended by 60 participants.

The farming for the future on-farm demonstration program has been growing in the Peace region. There were 19 projects underway in the region. Over the past year, 14 new participants were reviewed by the committee with eight being accepted.

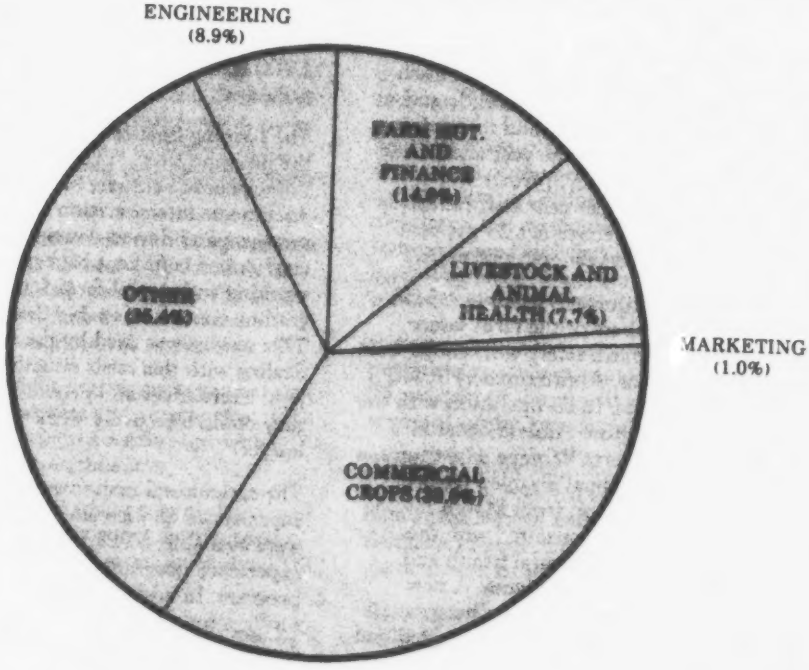
In the farm financial management area, a number of district office teams organized and taught portions of the record keeping courses.

The local agriculture development committees were active during the year. They responded to the Environment Council of Alberta land use report and developed policy recommendations for Alberta Agriculture and Alberta Energy and Natural Resources. A number of appeals for Alberta Energy and Natural Resources and Alberta Agricultural Development Corporation were held and recommendations made.

NUMBER OF CLIENT CONTACTS

Office interviews	19,061
Telephone calls	25,299
Farm visits	2,642
Educational events	337
Attended by	9,673

Client Contacts by Subject Area



REGION 6 - PEACE RIVER REGION

ENGINEERING AND RURAL SERVICES DIVISION

This division produced a wide range of services not readily available from nongovernment sources. Such services assisted in improving the quality of life and rural communities, and in developing and maintaining viable farms. During the course of the year and in line with government downsizing policy, further reorganization resulted in a 10 per cent staff reduction of five permanent staff - an effective net 23 per cent staff reduction in the past two-year restraint period.

As a result of co-operative efforts by volunteer farm organizations and staff members of the farm safety program, 260 lifesaver and farm safety workshops were held throughout the province. Approximately 7,500 people attended these courses. In co-operation with the Canadian Paraplegic Association, Alberta division, Women of Unifarm and Alberta Women's Institutes, a successful second western regional disabled farmers' conference was held in Edmonton from March 20-23, 1985. Two regional task forces consulted with the program staff in developing agricultural health and safety policy for their respective provinces. A new model display depicting common machine hazards related to specific farm equipment was constructed and unveiled at the disabled farmer's conference. Two studies were conducted, and resulted in the publication of *Traffic Laws for Farm Vehicles and Implements*, and the design of a fire extinguisher familiarization workshop. A grant which was given to the Alberta-British Columbia Farm Equipment Dealers' Association enabled them to print and distribute 30,000 copies of the 1985 farm safety calendar. *A Child's Guide to Farm Safety* was revised and printed; 65,000 copies were distributed to rural students in grades one to four. In addition, 500 teachers' kits and 1,000 poster calendars were sent to rural schools. The farm accident monitoring system provided useful data on farm accidents. Accidental fatalities, disabling injuries and highway accidents involving farm implements continued the downward trend.

Agricultural law cut across every discipline in agriculture. The ever increasing complexity of farm business - speciality crops, intensified farming operations and sophisticated marketing procedures — gave birth to new problems unique to their specialization.

This year staff served as resource personnel in legally interpreting new phraseology and determining the legal obligations incurred with the various business arrangements. Staff members disseminated this information throughout the province by personally lecturing at 172 farm law seminars to approximately 4,700 farmers, agri-businessmen and government personnel.

The farming financial crisis resulted in changing half of the program from "preventive" law to "curative" law. Foreclosures, seizures, bank debentures, calls and documents interpretation dictated the course content of seminars and day-to-day operation. During the year staff gained sufficient background information through working with actual farm foreclosures and attending upgrading courses to enable them to be a resource base. This service was used by the farming public, while dealing with this crisis situation, in understanding their legal alternatives and providing them background so they could effectively work with their accountant and lawyer.

The agricultural manpower programs section experienced an increase in activities. Four programs were available: STEP, PEP, the veterinary work experience program, and the summer farm employment program. In addition, this section provided consultation services for other wage subsidy programs, agricultural career counselling and an employee placement service. Approximately 1,200 employees were serviced by this unit. Programs were delivered in co-operation with other provincial departments, and the Canada Employment and Immigration Commission as well as local Canada Farm Labor Pool offices.

The water well recovery program provided grants of $18,603.56 to 12 farm applicants.

Rural Services Branch

The community services section provided administration and program support to 282 agricultural societies throughout Alberta. Agricultural societies had two major concerns in 1984-85: improving the financial management skills of local boards, and planning activities to meet the needs of agricultural society members and the community. Staff community services assisted agricultural societies address their concerns through meetings and workshops.

Nine information meetings were held with various communities to provide preliminary information about the agricultural societies program. Fifty-eight consultative meetings were held with new and existing agricultural societies covering the areas of

reorganization, leadership development, program planning and facility development and operations. Staff of the community services branch provided leadership and group process training at the annual convention of two provincial and interprovincial horticultural and exhibition organizations. Eight new agricultural societies were formed in 1984-85.

Seven workshops were held to assist in the organization and continued development of local fairs throughout Alberta. Funding was provided for a variety of fair judges at agricultural society fairs and at Women's Institute competitions throughout the province.

Two hundred and thirty-eight participants representing 83 different agricultural societies and community organizations attended 19 regional workshops which concentrated on financial management.

Community services continued to support and co-operate with the Alberta Association of Agricultural Societies in its capacity as the provincial umbrella organization for agricultural societies.

Financial support for programs such as exhibitions, fairs and displays was provided in addition to assistance in the construction, renovation and operation of multi-use community facilities. As agricultural societies have matured, the emphasis has shifted from construction to operation and programming of facilities. To accommodate this, funds from the annual budget allocation were redistributed from capital to operating grants. As a result the annual maximum grant per eligible C&D class fair was increased from $5,000 to $7,000. One hundred and ninety-five operating grants totalling $1,066,228, 151 fair grants totalling $195,414 and 20 capital grants totalling $1,024,113 were provided.

The agricultural services section provided administrative and operative support to agricultural service boards and agricultural development committees. Sixty-six agricultural service boards were allocated $3,990,000 in grants to assist them in the execution of essential programs in soil conservation, weed control, field crops, pest control, horticulture and tree planting, livestock improvement projects, training and extension. Cities and towns received $70,000 in grants to carry out weed control programs.

Emphasis was placed on providing training to agricultural service boards, agricultural fieldmen, district agriculturists and district home economists in order to increase board effectiveness in program planning, budgeting and implementation. Forty-two workshops were held with boards across the province to define the purpose of boards, the role and responsibilities of board members and staff.

To further assist boards in carrying out their activities, four issues of the provincial agricultural service board newsletter and a training opportunities calendar were circulated. An agricultural service board planning guide was developed and circulated to boards together with several agricultural program outlines. Additional outlines are being developed on a number of programs.

A major change to the agricultural service board provincial guidelines provided for the advancement of 75 per cent of the annual grant allotment on the approval of the memorandum of agreement.

Provincial input into the organizing, planning and resourcing of regional and provincial agricultural service board conferences and training sessions for agricultural fieldmen improved communications and increased the participation of board members.

Sixty agricultural development committees provided understanding of local conditions and needs in hearing appeals on loan applications and the disposition of public land.

Committees contributed to the development of policies in Alberta by identifying program needs in rural communities, evaluating the impact of programs and the effectiveness of the delivery system. Most committees made submissions to the Environment Conservation Authority hearings on "Maintaining and Expanding the Agricultural Land Base in Alberta".

A joint conference of agricultural development committees, the Agricultural Development Corporation and related interest groups was held to discuss many aspects of agricultural credit. Three meetings were held by agricultural development committees at the regional level to discuss crop insurance, public land disposition policy and general regional agricultural concerns.

Engineering and Home Design Branch

Publications were again a major thrust for the engineering specialists, along with emphasis being placed on developing computer software which is compatible with the department's equipment.

A build-your-own series was initiated and received a high degree of acceptance, particularly the plans for a remote temperature monitor and a pea sheller. Major publications were on fan selection, swine housing layouts and swine manure handling systems.

Seminars and the development of extension material for the use of regional staff as well as specialist staff covered a wide range of topics from machinery to water systems.

Major contributions were made to the canola production and handling seminar which was presented in three locations in the province.

The skill training program served over 700 students during the winter, with welding and mechanics being the topics in greatest demand.

The extreme dry conditions in the southern half of the province placed a heavy demand on the dugout pumping program. The department's complement of equipment was increased to 46 from 36 and augmented with an additional 11 units borrowed from PFRA. Over 500 farmers were assisted by the program with the average set up requiring the use of two or more units to divert the water that required distance. Extensive efforts were also expended on the repair of the equipment last winter to ensure a situation of readiness for the 1985-86 season.

There was an increase in the number of complaints lodged under the Farm Implement Act Administration directed mainly at unfulfilled promises with regards to used machinery purchases. Concerns regarding poor repairs also ranked high on the list. Administratively, the $25,000 bond was in place with license renewals running smoothly. The dealer/distributor files were standardized on the computer to improve the efficiency of the licensing system.

Demand for the Canada Plan Service information remained steady with requests for utility buildings increasing over previous years.

Two new seed cleaning plants were opened during the year implementing design changes recommended by staff engineers.

The problem of stray voltage which plagued the dairy industry across the country was investigated with 162 farms being surveyed to determine the incidents and severity of stray voltage. Twenty per cent of the farms showed problems. This is much less than the national average.

The agro-electronic show was held in conjunction with Lakeland College in Vermilion attracting in excess of 2,000 visitors to view the more than 60 exhibits.

Extension Services Branch

The extension services branch provided education and development services to support extension activities of the field services sector.

It was responsible for agricultural education, the green certificate farm training program and the home study program. The Alberta-Hokkaido exchange program was transferred to the marketing sector because it was better suited to that sector's trade development objectives than to the educational objectives of this branch.

There were two major accomplishments during the year. With the agreement and support of Alberta Education, a plan was developed to increase agricultural awareness education in the schools. The other was a significant increase in the use of home study programs, mostly due to a co-operative venture with the Canola Council of Canada to produce and distribute the *Canola Growers' Manual*.

Agricultural education staff co-operated with Alberta education in a review of public school curriculum. The purpose was to identify opportunities where information on the agricultural industry would enhance student awareness of its importance to the provincial and national economy.

A teachers' workshop on the topic of agricultural education in high schools was held in November 1984.

A slide set script on the topic of careers in agriculture was prepared and turned over to the broadcast media branch for technical production and release.

The home study factsheet, listing 80 courses on agricultural and rural topics, was published for the current year.

Co-ordination of agricultural education and extension programs between the agencies involved was the prime focus of the agricultural education and rural extension advisory committee.

The Agriculture Hall of Fame selection committee reviewed 22 nominations this past year and recommended four Albertans to be inducted into the hall of fame.

The objective of the green certificate program was to develop the technical and managerial skills required by those desiring to enter or continue a career in farming. This adult education operated in an apprenticeship style by continuing to co-operate closely with more than 200 farmers in Alberta in developing the program, conducting the training and testing and certifying the graduates. The program offered training in dairy, beef, swine, sheep, dryland and irrigated crop production. The program operated with an average population of 180 to 200 trainees employed on training farms spread throughout the province from High Level to Warner. Seven regional farm training specialists provided program administration and provided farm labor and manpower consultation services.

Co-operation was maintained with three agricultural colleges to provide facilities for testing of trainees by farm training appointed test boards. A total of 129 certificates were issued to competent trainees during the year. These graduates found ready employment on farms as a result of a continued good demand for skilled and qualified farm manpower.

The primary purpose of the home study program was to disseminate comprehensive agriculture education material to the farm operator. Two new courses, the Alberta dairy management course and the canola growers' manual, were produced and distributed. Developmental activities included a rewrite of the Alberta soils course and the acceptance of a donation of 20 microcomputers from IBM which will be used during the coming year to hold hands-on seminars for farmers.

The production of the canola growers' manuals was done in co-operation with the Alberta Canola Growers' Association and the Canola Council of Canada. The growers' manual accounted for an increase of 13,000 registrations over the previous year. Total enrolment last year for the 11 available home study courses was 18,000 students. Accompanying course delivery were in-service training sessions and district producer seminars.

MARKETING

The marketing sector of Alberta Agriculture provided a service to Alberta producers and processors, and facilitated a co-ordinated government response to their requirements. The sector assisted through the provision of market development and support services to Alberta's agriculture and food products industry to optimize returns from market opportunities and encouraged the development of value-added activity. The broad objectives of the marketing sector were fulfilled by:

- evaluating market opportunities domestically and internationally
- co-ordinating and supplying services to assist in achieving a response to these opportunities
- liaising with and utilizing established private and public sector resources
- developing market and sector strategies and assisting in the development of individual enterprise strategies
- providing a mechanism for private sector input into the department's policy and planning process.

The marketing sector as a government service organization provided a wide variety of services and support programs to the private sector. Close contact with the private sector was fostered to encourage the exchange of information which permitted the marketing sector to respond with support in the form of diverse technical, financial and marketing information and assistance.

MARKETING SERVICES DIVISION

Agri-Food Development Branch

The agri-food development branch continued in 1984-85 to direct fiscal and manpower resources to support marketing of Alberta's agricultural and processed food products. Increased emphasis was placed on specific opportunities (frozen embryo genetics, domestic feed industry utilization of canola meal), greater sophistication in the promotional support for Alberta's products, marketing education among industry executives and improving the opportunities for direct marketing under the farmers' market program.

In support of identified market opportunities, a number of programs were introduced with regional emphasis in conjunction with regional and production staff. An evaluation of the commercial potential of triticale in central Alberta was conducted. The evaluation included field production trials as well as trials to test its potential for use in feedmills and feedlots. In support of the marketing effort with canola meal, an ongoing sow reproductive performance trial was initiated and will run for a further year. Considerable input was supplied to canola grower and crusher organizations in support of the requirement for an industry nutritionist to promote canola meal utilization in western Canada.

For the first time, direct developmental and promotional support was introduced for the Alberta frozen embryo industry. This was a continuation of the previously identified priority based on Alberta's pre-eminent position in cattle genetics and embryo transfer technology. Similar initiatives were taken with the feedmill industry to support its importance to the grain feeding livestock industry.

The branch continued to work with industry to improve the level of promotional material available to support the marketing effort. This resulted in world-class material capable of competing with standards set by national and international competition. Examples included individual and all-breeds promotional material for the beef, dairy, sheep, hog and horse industries, all specifically designed to support export marketing opportunities. Similar commodity material was provided for the alfalfa, pulse, broiler, saskatoon, mushroom and wool industries. In the processed food area, support for the promotional activities of the Alberta Culinary Arts Foundation (winners of five individual gold medals with Alberta food products at the World Culinary Olympics in Frankfurt) led again to

a range of posters and promotional material. During the year, individual food processing companies were assisted with similar materials and the *Alberta Wine and Cheese* and *Alberta's Food Products* brochures were both updated and reprinted.

In response to the White Paper initiative in regard to agricultural education, a number of new programs in marketing education were introduced. A series of "how-to" seminars covering developing marketing plans, pricing and distribution, and advertising and promotion were introduced for industry executives. Additional programs were introduced to cost-share the expense of both producer organizations and company executives attending specialized institutional marketing courses.

In joint consultation with the Provincial Board of Health, a new set of both health and operating guidelines for farmers' markets were developed. The new operating guidelines assisted in clarifying and facilitating the operation of bona fide markets.

ASSISTANCE UNDER THE AGRICULTURAL GRANTS ACT PROVIDED TO INDUSTRY IN FISCAL 1984-85

Sector	No. of Grants	Total
Meat and Dairy Producer Associations	5	$ 388,657.00
Food Processing Industry	28	537,132.00
Cattle Breed Associations	25	353,817.00
Horse Breed Associations	7	99,027.00
Other Breed Associations	5	43,782.00
Livestock Shows and Congresses	5	105,000.00
Semen and Embryo Companies	4	47,668.00
Crop and Horticulture Associations	18	286,630.00
Crop and Horticulture Companies	6	23,435.00
Farmers' Markets	78	134,395.00
Total	181	$2,019,543.00

Branch staff provided assistance to market development division activities which included incoming and outgoing missions, technical support to missions (South Africa, Japan and Asia), assistance with planning, organizing and staffing of booths at Agribition, Equitana, Calgary Bull Sale, Northlands, B.C. Food Show, Hostex, ARFEX, Alberta Food Processors' Association mall displays and individual commodity group and company promotions.

Day-to-day liaison was maintained with producer groups, boards and commissions throughout Alberta as well as over 100 food processing companies.

Under the Alberta/Alaska J.G. O'Donoghue Agreement, assistance was given to Alaska to assist in their review of agriculture and food industry support programs and policies.

During the year, grants totalling just over $2 million were disbursed in support of industry's development and promotional programs.

Food Processing Development Centre

The Food Processing Development Centre, which has a mandate to increase the capability of Alberta's food processors to meet the needs of the marketplace through application of new technology and development of new products and processes, was officially opened December 6, 1984. The centre has over 30,000 square feet of pilot processing area, product development and evaluation laboratory, a maintenance and machine shop and an information service centre.

Product development laboratory staff and facilities completed approximately 40 industry-oriented requests for assistance in concept development and evaluation. Areas of involvement included new product formulation, modification of existing product, process-product capability and shelf-life stability testing and assessment. Products developed included meat, dairy, and poultry products; bakery products and pastry; carbonated beverages; specialty soups and convenience foods. Numerous projects were developed from the laboratory bench with an increasing number being evaluated in the section's test kitchen facility. In this area conventional preparatory equipment associated with the hotel-restaurant-institutional trade was used to evaluate new product formulary compatibility with commercial operation procedures.

Complementing laboratory development was the sensory evaluation or taste panel area which evaluated new modified products objectively for flavor, texture and color. In-house and external personnel were used to generate typical consumer response through panel sessions.

The pilot plant area, notably the wet processing and meat areas, provided simulation of industrial process to access and evaluate product and process performance. Ten projects of varying complexity were demonstrated. An initial production of approximately 900 cases of saskatoon jelly were processed for feasibility production assessment. In another study, a substantial quantity of specialty meat product was produced for a consumer test market study which was conducted in southern Alberta.

In an attempt to demonstrate new packaging technologies which may be applicable to Alberta food products and thereby increase their competitiveness, 11 requests for packaging assistance were recorded. These included either laboratory shelf-life study assessment or demonstration of controlled or modified atmosphere packaging to increase product quality to the consumer. Ethnic foods, bakery, vegetable and pasta products were evaluated.

The centre and staff provided assistance in state-of-the-art product/process technology information service through scientific and technical literature acquisition, interpretation and transfer. In addition to processing technology information, other requests involved ingredient and packaging advice or consultation. Fifty individual requests for information were reviewed by the Food Processing Development Centre personnel.

The Food Processing Development Centre personnel assisted Alberta food processing industry through in-plant assistance or trouble-shooting industrial problems. Three major in-plant projects have been carried out since the opening of the centre.

An in-depth co-operative study with the National Research Council and Agriculture Canada involving continuous microwave enzyme inactivation of mustard was undertaken and completed.

The centre supported and encouraged local processors to utilize centre facilities and their own personnel to evaluate product/process development. Several processors became involved in co-operative work with the Food Processing Development Centre to achieve this end.

Beyond industrial projects undertaken, the centre hosted various meetings, seminars and workshops to benefit the food processing industry or ingredient and equipment suppliers to the industry. The centre also hosted international missions and Alberta commodity groups.

The majority of the year involved the hook-up and initial testing of equipment and services at the centre. The centre evaluated its partial year of operation to determine which areas have the greatest impact on the agricultural food processing industry.

Business Analysis Branch

During the 1984 fiscal year, the business analysis branch continued to be active in providing professional business and financial management services to both specific departmental programs and to the agri-business sector in Alberta.

More specifically, the branch provided financial analysis and audit support to the rural development division in respect to applications for assistance under the Canada-Alberta Subsidiary Agreement on Nutritive Processing Assistance (NPA).

As well, the branch provided evaluation and audit support to the community services branch in respect to the agricultural societies capital grant/loan guarantee program, and financial consultative support principally to smaller agri-business firms and agricultural organizations in the province.

Branch members also served on a number of committees, and provided internal department support in the business analysis area.

The NPA program, a federal/provincial initiative, was first signed in 1975. The program, which makes grant assistance available for the establishment, modernization, or expansion of agricultural processing firms in rural Alberta, has, since its inception, provided approximately $29 million in assistance on $150 million in invested capital. The business analysis branch provided the provincial manpower for the evaluation and audit functions under the program, and in 1984-85 was involved in completing 54 project evaluations resulting in $4,365,548 in grant assistance offers on $19,626,508 of proposed capital investment, and 63 payment inspections resulting in $6,394,533 in program disbursements.

Projects supported by NPA varied between $3,000 and $3,000,000 of invested capital, and furthered the development of agricultural processing activity in rural Alberta.

Analytical services were also provided in respect to applications received under the agricultural societies capital grant/loan guarantee program. This program provided assistance to approved capital projects which contributed to community development and were undertaken by registered agricultural societies. During 1984, the business analysis branch completed assessments on 21 files recommending $249,955 in grant assistance and $205,000 in loan guarantees. The branch also completed compliance audits (to ensure that funds disbursed had been spent as intended) on most projects which were approved in 1983.

In the management support area, the branch continued to assist new and developing agri-business firms with an emphasis on providing sound information and promoting the maintenance of good business practices. Projects undertaken in 1984 included assistance to small processors in the areas of accounting and bookkeeping practices, financial statement analysis, capital budgeting decisions, assessment of financial restructuring alternatives, and available capital assistance programs.

On occasion, assistance requests were handled in conjunction with staff of other branches in the division.

Agricultural Processing Development Branch

The branch placed increased emphasis on programs and services oriented to the efficient operation of Alberta food processors. Branch programs reflected the continued efforts by this Alberta industry to acquire new technology, better methods of processing and improved efficiency with a minimum of capital expenditures. Staff delivered programs and services including technical and economic evaluation of new products and processes, financial assistance and incentives, support for applied research and development and feasibility studies.

The agricultural processing development branch, during the year, focused on assisting Alberta firms to undertake new technology awareness, product and process development and new packaging and product presentation. Forty-nine firms benefited from financial incentives to develop new processed meat products, processed vegetables, confectionery items, pasta products, and numerous speciality items. A significant number of experimental process systems were evaluated including fresh and processed meats technology, oilseed processing, cereal fractionation and institutional product processing. Many firms undertook development of new packaging to foster entry of new products into the market or to expand markets for existing products.

Feasibility studies and economic evaluations were developed with numerous firms in areas such as starch production, sweeteners, meat processing by-product upgrading, small tree fruits, alfalfa and other crops for dehydrating. Several key processing facilities, closed through attrition or rationalization, were evaluated for possible other uses.

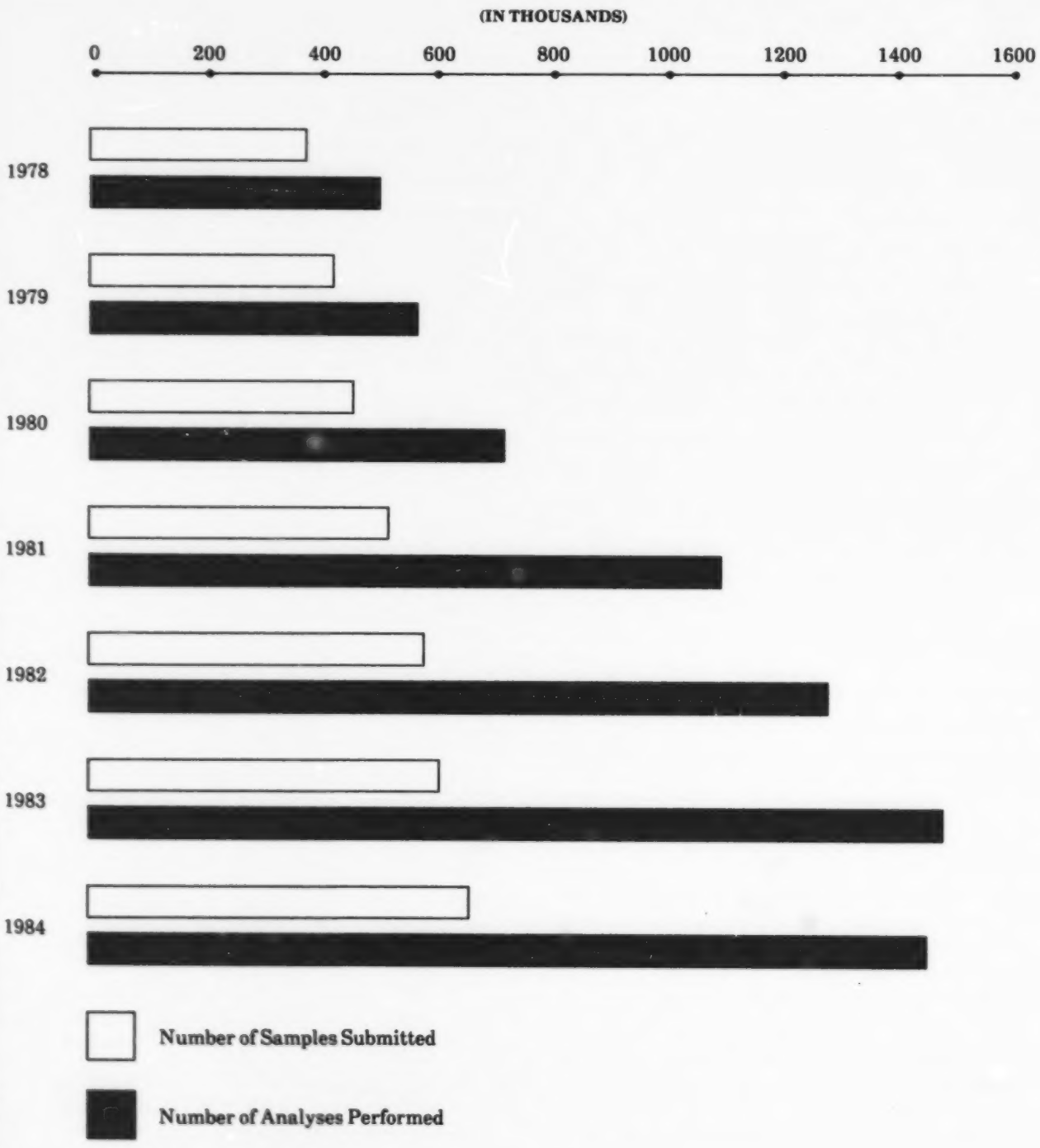
Branch personnel contributed to national committees on energy, food, meat and plant materials, as well as industry committees assessing research and development. They provided numerous position papers on major sectors of the Alberta food processing industry to management, other government departments and industry. Consultant studies were undertaken in meat and cereal processing; evaluations were updated in malting, meat by-product processing and select areas of food manufacture.

A considerable amount of time was devoted to answering many enquiries into establishing new processing ventures in Alberta. Background information, counselling and assistance in determining feasibility were typical of branch services. Research results and business development advice were provided to individuals and firms seeking technical knowledge about processing opportunities in Alberta.

Food Laboratory Services Branch

The main objective of the food laboratory services branch was to ensure the quality, safety, and nutritional values of Alberta's food and agricultural production at the producer, processor, exporter and consumer levels. The branch, through its laboratories in Edmonton and Airdrie, provided microbiological, chemical, organoleptical and consulting services to all sectors of the Alberta food industry, hospitals, and various government agencies concerned with food production,

NUMBER OF SAMPLES SUBMITTED AND NUMBER OF ANALYSES PERFORMED BY THE FOOD LABORATORY SERVICES BRANCH DURING THE PAST SEVEN YEARS



processing, quality, inspection, transportation, export and retail trade.

As in the past years, the food laboratory in Edmonton continued monitoring foods, food ingredients and other agricultural commodities for the presence of pesticide, herbicide, industrial contaminants such as PCBs, sulfonamides, and other biocide residues. A total of 775 samples was analyzed for the presence of these contaminants during the 1984-85 fiscal year.

The laboratories in Edmonton and Airdrie analyzed 28,547 random milk samples for the presence of antibiotic residues. Only 0.41 per cent of these samples was found positive for antibiotics. In addition, 185 samples of meat, honey and other foods were analyzed for the presence of antibiotic residues. Five samples of meat contained antibiotic residues. No antibiotic residues were detected in any of the 80 honey samples examined.

From April 1, 1984 to March 31, 1985, the food laboratory services branch received 664,627 samples of various foods, food ingredients and various other agricultural commodities, requiring 1,460,891 tests.

The graph illustrates the number of samples submitted and number of analyses performed during the past seven years.

SAMPLES RECEIVED AND ANALYSES PERFORMED BY THE FOOD LABORATORIES IN EDMONTON AND AIRDRIE APRIL 1, 1984 to MARCH 31, 1985
(figures in brackets are for the previous 12-month period)

	No. of Samples Analyzed		No. of Analyses Performed	
Milk and Cream	34,024	(42,947)	140,980	(136,516)
Butter	163	(246)	681	(824)
Cheese	2,412	(2,459)	9,685	(8,746)
Ice Cream	4,187	(2,097)	9,874	(5,078)
Dry Milk	6	(17)	31	(39)
Processing Plant Survey	375	(148)	1,345	(394)
Honey	541	(768)	1,913	(1,219)
Washing and Sanitizing Agents	18	(46)	23	(62)
Water	457	(377)	1,501	(1,034)
Eggs	1,189	(1,023)	2,109	(1,356)
Meat	2,081	(2,529)	10,213	(10,049)
Vegetables	643	(735)	2,358	(1,977)
Fish and Wildlife	204	(195)	843	(800)
Cereal Products and Forage	265	(548)	1,163	(1,252)
Human Specimens	39	(5)	42	(8)
Soil	35	(152)	40	(166)
Research and Collaborative Studies	833	(739)	849	(748)
Miscellaneous Foods	2,151,	(2,115)	9,050	(1,371)
Central Milk Testing	615,004	(560,776)	1,268,191	(1,306,604)
TOTALS	664,627	(617,922)	1,460,891	(1,485,184)

MARKET DEVELOPMENT DIVISION

The market development division, responsible for both domestic and international market development, continued to develop, co-ordinate and implement services and support programs to assist agricultural producers, processors and marketers to increase sales of agricultural commodities, processed food, feed products and technical services (consulting).

In 1984 trade in agriculture and foodstuffs continued to grow. Alberta shared in that growth by exporting approximately 21 per cent or $2.3 billion of Canada's $11 billion in agricultural and food exports.

The division continued to emphasize Alberta's best value-added products - those based on meat, livestock, grain and canola, and the products derived from them. In 1984 the division assisted companies to begin in the formation of an export consortium for consulting services, i.e. to establish agriculture, food processing and marketing projects in lesser developed regions of the world.

Alberta remained a major supplier of export commodities including wheat, wheat flour, barley, canola, meats, whisky, beer, water, cattle, swine, animal feeds, hides and skins. Alberta also exported large quantities of canola oil and meal, peat moss, semen, embryos, forage seeds, honey and malt. Export markets were developed and expanded for cookies, crumpets, pasta, frozen bread dough and processed meats.

The division emphasized the following markets and commodities in order of priority:

Markets:
- Alberta, British Columbia and Quebec
- Japan
- Pacific Northwest (United States)
- California and Western United States
- South Korea
- European Economic Community (United Kingdom and West Germany)
- Mexico
- People's Republic of China
- U.S.S.R.
- ASEAN (Association of South East Asian Nations)

Commodities/products:
- Meat - beef, pork, horsemeat, processed meat products
- Canola - oil (refined and crude), meal, seed
- Processed food - flour and pasta, processed vegetables and other grocery products
- Livestock - genetic stock (beef, dairy, horses and swine)
  - commercial and other livestock
- Field crops - forage seeds, pulses, alfalfa, potatoes, sunflower
- Other products - peat moss, honey, malt, malting barley, hides, offal, dairy products, vegetables, etc.

Services:
Support for consultants who provide transfer of technology and expertise out of Alberta on international development projects e.g. large agriculture projects (infrastructure, production, processing, storage, transportation, distribution and marketing) and all aspects of rural development. The market development division offered financial assistance, market development programs and advice to Alberta companies on market opportunities and methods of marketing for commodities, products and consulting services.

The division serviced Alberta, North America, and overseas markets. The division emphasized trade show participation, which encouraged Alberta companies to explore market opportunities, as well as the sale of technical information and skills.

The Canadian Market

During 1984-85, Alberta Agriculture again stressed the domestic market as a priority for Alberta's food, feed and beverages. The majority of market development activities focused on markets in Alberta, British Columbia and Quebec.

About one-third of Alberta's commodities and over two-thirds of Alberta's processed food, feed and beverages were consumed in Canada. Meat, live animals, crop and crop products, including wheat flour, dehydrated alfalfa and canola products were the main goods shipped to other provinces.

Market development personnel, working closely with the agri-food development branch and the Alberta Food Processors' Association, encouraged many new companies to enter the marketplace. As well new products were introduced. Membership in the Alberta Food Processors' Association continued to increase in 1984-85.

Import replacement continued to be a major concern of the market development division. The division examined in greater detail the percentage of imported products sold in Alberta, and continued to encourage retailers to more fully support Alberta products.

A retail in-store identification project was continued in an effort to encourage Albertans to buy more Alberta products. Better Buy Alberta shelf tags were used to label Alberta products in 120 stores in Calgary and Edmonton.

In-store tagging together with television advertising increased consumer awareness of Alberta products. Consumer awareness was further emphasized in chefs' demonstrations and mall promotions throughout Alberta.

Two regional promotions in central Alberta involving district home economists, retailers, the Alberta Food Processors' Association and the market development division helped increase sales of local products in markets outside Edmonton and Calgary.

The Alberta Food Market Advisory Committee, reporting to the Minister, continued to provide input on ways and means of improving and expanding the agricultural and food processing industry.

Forty Alberta companies participated in the Alberta Restaurant and Foodservice Association trade show, an increase over the previous year.

Commodity organizations for greenhouse vegetables, lamb and potatoes were assisted in strengthening their relations with wholesale buyers and retail managers via tours and meetings.

Alberta Agriculture encouraged horse breed associations to attend the 1984 Equitana North America to increase sales of horses at home and abroad.

British Columbia continued to be an important market for Alberta's agricultural products. The most important products were processed foods, red meats, livestock, table potatoes and dehydrated alfalfa. Because Alberta's agricultural and food products complemented, rather than competed with, British Columbia's, strong two-way trade resulted.

The Montreal beef market received considerable attention from market development in 1984. Ongoing programs were undertaken to maintain the traditional carcass trade, while expanding the market for boxed and portion cut beef.

Utilizing incoming missions, attendance at trade shows, and frequent territory trips, considerable effort was spent working with the Quebec Culinary Society, Quebec Restaurant Association, five major Quebec retail chains, and Alberta meat packers. The development of a new Alberta beef brochure and a program identifying Alberta beef as a "culinary classic" facilitated trade by conveying a top-quality image.

The Ontario markets for livestock and value-added food products were pursued via participation in the Royal Winter Fair and Hostex Food Show in Toronto. As a result of territory trips to Toronto, incoming missions from the major grocery chains' meat buyers have been scheduled for 1985, in order to increase the sale of Alberta meat products to Ontario.

United States

Exclusive of grains, the United States continued to be Alberta's largest foreign market for agricultural and food products.

1984 saw a tremendous increase in the export of agricultural products to the United States from 1983, increasing by 42 per cent to $300 million from $211 million.

Live animals, mainly slaughter cattle and breeding stock, were the main reason for the increase with sales increasing to $135 million from $67 million. Live animals, red meats (pork and beef) and whisky continued to be Alberta's top three exports to the U.S. (17 per cent of total sales).

Alberta continued to take an aggressive role in promoting its superior genetic beef and dairy stock through the U.S. livestock show program. In 1984, Alberta Agriculture, in co-operation with Alberta-Canada All Breeds Association, participated with a promotional booth at four major shows: Madison, Billings, Denver and Houston.

Red meat sales to the U.S. totalled $56 million, an increase of 30 per cent from 1983, with priority markets being Washington, Oregon, and California. Two factors facilitated this increased trade. First, recent changes in Canada's ribbing system have brought it in line with the U.S. system. As well, Canada's beef grading system, which differs from the U.S. system, encouraged a leaner product which today's consumers

seem to prefer. Canada Week promotions arranged by Canada West Trading Company in co-operation with the market development division were held in Safeway stores in Phoenix, Hawaii, Spokane and Portland. They featured Alberta pork, beef, processed meats and a variety of grocery products.

January 1985 saw canola oil receive G.R.A.S. (generally regarded as safe) status in the U.S. Market research indicated future sales for canola oil should be promising. As a result of research trials initiated by Alberta Agriculture on canola meal, the Pacific Northwest in the U.S.A. became Alberta's best export market with sales exceeding $12 million.

Alberta's seed potato exports to the U.S. increased steadily with the prime market being the Pacific Northwest.

Peat moss sales to the United States continued to grow with approximately 80 per cent of Alberta's production being exported to Oregon, Washington, and California. The Alberta Peat Moss Harvesters' Association completed a research study supported by Alberta Agriculture.

For the first time, 10 Alberta companies participated at the California Grocery Show this past year.

Market development staff in co-operation with a number of Alberta companies have pursued markets in:

- Denver - A Canadian Solo Food Show (sponsored by the San Francisco Consulate) was held for the first time. Eight Alberta food processing companies participated.
- Alaska - Dairy and beef cattle sales were made as a result of incoming and outgoing missions funded by market development under the Alberta/Alaska J.G. O'Donoghue Agreement;
- Minneapolis - Canadian Solo Food Show enabled several Alberta food processors to get into the central U.S. marketplace for both the foodservice and grocery business.

Alberta continued to liaise with American state governments particularly through the Western Association of State Departments of Agriculture (WASDA) and the Western United States Agriculture Trade Association (WUSATA).

Pacific Asia

The Pacific Asia region was the focus of significant market development activity by Alberta Agriculture. The Honourable LeRoy Fjordbotten, Minister of Agriculture for Alberta, visited Japan, Korea and China in May 1984 which included visits to Alberta's three sister provinces of Hokkaido, Kangwon and Heilongjiang. A wide range of Alberta's agriculture and food products were promoted during this and several other private sector/government missions to the territory. Some specific examples of key export items to this territory included livestock, meat, canola, dehy alfalfa, forage seed, food products, and consulting services.

With respect to Japan, two key projects were undertaken by the department to further develop Alberta's exports of beef and cheese to this market. Both projects resulted in additional sales of these items being made during the 1984-85 fiscal year. Other commodities which received promotion attention with a view to enhancing our position in Japan included pork, dehydrated alfalfa, swine breeding stock and food products. During the 1984-85 fiscal year, the groundwork was laid to place two Alberta Agriculture employees in Tokyo, one in the Alberta Government Office and the other to work with Seiyu Department Stores (a major food retailer in Japan).

As a direct result of Alberta Agriculture's two livestock demonstration projects in Korea, the feed industry there began importing significant quantities of canola meal from Alberta. While the volume of beef cattle exports to Korea declined significantly in 1984-85, new areas such as rye seed and swine exports were developed.

During the 1984-85 fiscal year, efforts were made in Australia and New Zealand to establish direct buying relationships in the area of food products. Australia and New Zealand continued to purchase semen and embryos from Alberta and many private sector missions took place in this regard. Canola oil shipments to these markets continued and efforts were made during 1984-85 to bolster these volumes.

Alberta Agriculture co-ordinated the first-ever Canadian canola meal promotion mission to Southeast Asia. The first commercial sale of canola meal also occurred and the industry, encouraged by the outcome

of the mission, decided to commence feeding trials to promote expanded canola meal utilization in Southeast Asia.

Small quantities of high quality beef were exported to Hong Kong for the first time and canola oil shipments to Hong Kong continued.

Taiwan purchased forage seeds and large volumes of cattle hides. Specific efforts were made to further identify market opportunities in Taiwan.

China, representing one of the world's most complex markets, continued to introduce policies to make possible the involvement of foreign agricultural interests in Chinese agriculture. Alberta Agriculture introduced a pilot project in China to address the productivity potential of China's vast northern rangelands.

Important progress was made in identifying and assessing novel approaches to market development in China, given China's shortage of foreign exchange. Important sales of cattle hides, malting barley and forage seed to China occurred during the 1984-85 fiscal year. China became the major export market for Alberta's cattle hides in 1984, a direct result of activities undertaken in support of the Alberta-Heilongjiang twinning relationship.

Europe, Africa, Middle East

Principal activities in Europe were directed towards dairy and beef genetic stock, leisure riding horses, forage and oilseeds, horse meat, mustard powder, sunflower seeds, honey, leafcutter bees, and consulting services.

The United Kingdom remained the focus for animal genetic stock with major sales of breeding bulls going into the U.K., Scotland, and Ireland. Alberta-produced semen was marketed into Germany, France, Italy and the U.K. Major sales were made to the Soviet Union.

Horse meat sales grew in 1984-85 with major market penetration into Belgium and France.

Participation in Equitana at Essen resulted in expansion of leisure horse sales for the following three breeds: Quarter Horse, Morgan, and Appaloosa. Major sales of the Quarter Horse were made to Germany, France, Switzerland and Italy.

A major growth area was deheated mustard powder which found new markets not only in Western Europe but also in meat processing plants in the Scandinavian countries and the Soviet Union.

A major technical mission of canola growers into Western Europe resulted in two return missions to Alberta by research and marketing groups from France and Germany.

Two successful leafcutter bee trials were held in Hungary and Yugoslavia. These trials resulted in sales of five million pupae annually to Yugoslavia.

Increased honey sales were made directly as a result of participating in product shows in Europe.

Consulting services were used to introduce Alberta-supplied inputs to projects in Europe, Africa and the Middle East.

Alberta's ability to plan and implement large scale dryland and irrigated farming projects was detailed in Saudi Arabia and Egypt during missions to those countries.

Market development followed up on opportunities for seeds for planting in Europe identified by two major seed missions over the previous two years. Alberta seeds were sold into many European markets as a result of continued efforts.

Latin America/Caribbean

This is a large region involving a wide variation in economic development. Market development matched commodities with potential markets in the various countries in this region. The commodity priorities were ranked thus: canola, livestock, specialty crops, consulting services, meat and processed foods. The countries were rated according to existing and future business. The country rated as having predominant opportunity was Mexico, followed by Colombia, Venezuela, Trinidad/Tobago, Costa Rica, Chile, Peru, Argentina and Barbados.

Mexico was by far the most important market in the region with a significant sale of canola seed valued at $28 million. As well, crude canola oil, valued at $6 million, was sold. The commercial canola meal trials which were initiated in 1983-84 were completed. They

revealed again there is no significant difference in the utilization of canola meal versus soyabean meal in rations utilizing sorghum.

After several years absence of any significant sales of livestock, the Mexican market broke wide open with over a million dollars of sales in 1984-85, with some 900 head of purebred beef and dairy cattle being exported to Mexico. In addition some purebred swine were exported during this period. More importantly the first major international shipment of boar semen from the artificial insemination station at Leduc went to Mexico in 1984-85.

Marketing development continued to push for the necessary import registration papers for canola oil, meal and seed for Venezuela. A technical seminar was held on canola oil and meal in Colombia and Peru to further promote the use of oil and meal in those countries.

Support was given to Alberta suppliers to participate in the Palermo Livestock Show in Argentina, the Prado Show in Montevideo, the Esteio Show in Brazil and the Guadalajara Livestock Show in Mexico. Cattle were sold to Argentina and Chile; semen to Argentina, Brazil, Chile, Uruguay and Mexico; and frozen embryos to Costa Rica.

A successful pulse mission was taken into Trinidad, Venezuela, Colombia, Panama, Costa Rica, Mexico and Cuba. In all countries, opportunities were identified for sale of beans, lentils, mustard seed and canola meal. A letter of intent was signed late in the fiscal period with the Cuban importing agency for the long term supply of 3,000 to 7,000 tonnes per year of beans, as well as up to 5,000 tonnes per year of canola meal. The sale remained dependent upon obtaining successful export financing to match the competition from France and Argentina. This was actively sought. Alberta pulse suppliers were successful in a number of world food program tenders, resulting in some $1.5 million worth of business over 1984-85.

Opportunities were identified for consulting services, i.e. agricultural development projects, in a number of areas, particularly Guatemala, Costa Rica and Colombia.

Forage seeds sales to Argentina increased significantly in the period, and enquiries were received from Chile and Colombia. Alberta suppliers shipped edible offals and hides into the Caribbean and Mexico, mainly via large brokers in the United States.

Enquiries were received for corn, frozen cows' feet, whole yellow peas, pearled barley, tallow, confectionery sunflower seeds, deheated mustard flour, canned wieners, cheddar cheese, butter-flavored canola oil, skim milk powder, broiler hatching eggs, premix for swine feed, racehorse oats, and potting soil mixture.

Enquiries about cross-bred animals, such as Simbrah (Brahma/Simmental cross), were received from Mexico and Colombia. Seminars were given on embryo transplant technology in Mexico and Colombia, and on utilization of boar semen in Mexico.

CANADA-ALBERTA SUBSIDIARY AGREEMENT ON NUTRITIVE PROCESSING ASSISTANCE

The Nutritive Processing Agreement was jointly administered by the Department of Regional Industrial Expansion and Alberta Agriculture. It provided direct assistance to eligible firms to either establish or expand and modernize agriculture and food processing plants in areas of Alberta outside the two major cities. The program was jointly funded at $28 million.

The period under review saw direct assistance provided to 127 firms in the amount of $6,394,533. In addition, 54 projects were offered support totalling $4,365,548. Details are provided in the two tables following.

This year also saw recommendations made for a new program that would succeed the Nutritive Processing Agreement. These recommendations were developed with the assistance of departmental and interdepartmental committees.

ASSISTANCE PROVIDED 1984-85

Facility	Number of Projects	Amount
Meat	29	$2,044,008
Feeds	19	830,270
Bakery	15	182,240
Canola	14	1,265,761
Dairy	5	190,829
Alfalfa	5	310,780
Vegetables	2	103,448
Miscellaneous	2	1,301,205
Fertilizer	17	165,992
TOTAL	127	$6,394,533

PROJECTS OFFERED SUPPORT 1984-85

Facility	Number of Projects	Amount
Alfalfa	3	$ 590,288
Bakery	4	84,959
Canola	1	24,979
Dairy	2	458,632
Feed	17	890,140
Meat	17	1,194,426
Miscellaneous	7	1,055,411
Vegetables	3	66,713
TOTAL	54	$4,365,548

RESEARCH AND RESOURCE DEVELOPMENT

In its second full year of operation, the research and resource development sector continued to pursue two major objectives: to strengthen Alberta Agriculture's activities in maintaining and expanding the province's basic agricultural resources of land and water, and to improve the technological base of Alberta's agricultural sector.

The sector was divided into the irrigation secretariat and three divisions - research, resource planning, and irrigation and conservation. In addition, two specialized sections, administration and special projects, handled sector-wide concerns. All of these units conducted activities to help the sector meet the following specific objectives:

- to promote management and conservation techniques to farmers, producer groups and local authorities, to achieve better use of land and water resources for sustained agricultural production.
- to provide irrigation project planning, land evaluation and resource analysis support to farm organizations, local authorities and provincial agencies, to assist them in the planning, allocation and development of Alberta's land and water resources, for the long-term benefit of agriculture in the province.
- to support the activities of the province's Irrigation Council in the council's role of administering the Irrigation Act and the irrigation rehabilitation and expansion program.
- to provide financial assistance and administrative support for the department's general research programs, the Alberta Agricultural Research Trust and the Farming for the Future agricultural research program.

RESEARCH DIVISION

In 1984-85, the major objective of the research division continued to be the improvement of the technological base of Alberta's agriculture industry. Significant activities included administering research grant programs, maintaining an inventory of current agricultural research projects, developing and implementing criteria for evaluating research programs, and disseminating research information. Division staff also co-ordinated research activities across the department, and assisted in upgrading the scientific awareness of department staff by encouraging their involvement in research projects.

Research grant programs managed by the division included Farming for the Future* and the Alberta Agriculture Research Fund. The research fund primarily supports research projects conducted by Alberta Agriculture staff. Projects financed under this program in 1984-85 ranged from plant biotechnology studies to animal vaccine testing.

The division also performed a number of administrative functions for the Alberta Agricultural Research Trust, which was established in 1966 as a funding vehicle for agricultural research in the province. Moneys from the trust were used to support projects conducted at academic institutions. The research division processed 22 project grants from the trust in 1984-85.

In addition to providing various services to the 16 decision and policy making bodies of Farming for the Future, division staff served on a number of departmental, provincial and national research-oriented committees and councils during the fiscal year. This involvement was aimed at ensuring effective co-ordination of the department's research activities, and at maximizing the exchange of research information within and between the department and other agencies.

* *A more detailed and comprehensive annual progress report on Farming for the Future activities is provided annually to the Legislature through the Minister of Agriculture.*

Farming for the Future

Farming for the Future, the agricultural research program supported by the Alberta Heritage Savings Trust Fund, completed the first year of its second mandate in 1984-85. Administered by the Agricultural Research Council of Alberta, Farming for the Future operated two funding programs in 1984-85, the research program and the on-farm demonstration program.

During the year the research program supported 101 projects for a total cost of approximately $4.3 million. This funding raised the total expenditures of the research program to $26.5 million since the program's inception in 1979.

Farming for the Future's on-farm demonstration program was established in 1982 to promote and support the transfer of new and proven technology from researchers to producers. In 1984-85, the program provided financial support to 77 new and 25 renewed demonstration projects at a total cost of $312,866.

On April 1, 1984, the research division assumed financial administration of 29 Farming for the Future projects being conducted by Agriculture Canada and Alberta Agriculture. Administration of funds for these projects, which totalled $1.6 million, had formerly been handled by the Alberta Research Council.

To provide a forum for discussion of project results and research policy, a Farming for the Future research conference was held in Edmonton on October 24, 1984. The conference drew more than 220 delegates to hear 12 speakers present their experimental findings. The success of this conference and a positive post-conference survey supported the idea of holding future research conferences.

During 1984-85, Farming for the Future actively supported the exchange of information between members of the research community. In response to requests for support, Farming for the Future offered a total of $26,000 to help stage a symposium on soil structure and a conference on ruminant physiology.

To expedite the transfer of research information to farmers, three producer-oriented publications were issued by Farming for the Future during the year. More than 53,000 copies of each publication were distributed to Alberta producers through the *Country Guide* magazine and through the department's regional and district offices. In addition, the 1984 *Farming for the Future Progress Report* was published and distributed.

RESOURCE PLANNING DIVISION

In 1984-85, the resource planning division continued to support planning activities related to the allocation, development, management and conservation of Alberta's land and water resources for the long-term benefit of the agriculture sector.

These division activities were carried out by three branches:

Land use branch - collected and analysed resource use information and participated in interdepartmental planning activities related to land and water resource issues.

Land classification branch - provided land evaluation and classification services related to land and water resource development and management.

Project planning branch - assisted in planning rehabilitation, development and management of irrigation delivery systems.

During the year, the division's efforts were focussed on the Environment Council of Alberta hearings into "Maintaining and Expanding the Agricultural Land Base in Alberta"; the Alberta Water Resources Commission hearings into the "South Saskatchewan River Basin";

the renewal of the irrigation rehabilitation and expansion program, which is being funded by the Alberta Heritage Savings Trust Fund, capital projects division, for a further five years; the indepartmental agricultural land base study; conducting inventories of drainable and irrigable land for the Alberta Water Resources Commission; and the development of automated systems for handling soil and land management data.

Land Use Branch

During 1984-85, staff of the land use branch provided leadership in the development and co-ordination of many departmental and interdepartmental programs and policies involving both public and private land use planning, water resource management planning, land reclamation and general resource inventory.

The land use branch continued to play a major role in developing the interdepartmental agricultural land base study. During the year, branch staff completed the agricultural inventory, drafted a series of thematic maps, and co-ordinated both the physical impact and economic analysis components of the study. The branch also participated in an interdisciplinary evaluation of the potential for wetland drainage across the province.

The computerized SIDMAP system, a joint project between Alberta Agriculture and Agriculture Canada, entered the application phase during the year. The system provided both tabular and map data on soil characteristics. This information, sometimes correlated with yield data, was forwarded to a variety of users, including those in government and private industry.

The land use branch was involved in the Environment Council of Alberta (ECA) hearings on "Maintaining and Expanding the Agricultural Land Base in Alberta". Branch staff prepared a summary of briefs presented to the ECA panel and co-ordinated the department's responses to panel questions.

Branch staff also represented the department on the interdepartmental resource integration committee, which oversees the integrated resource planning process. Through this process, plans were developed for the management of Crown lands to meet the needs of agriculture, forestry, fish and wildlife habitat, recreation and energy development.

The transfer of one staff position improved the branch's ability to co-ordinate, review and recommend economic research relating to land and water resource management and planning.

In 1984-85, branch staff were involved in interdepartmental committee work related to water management plans, co-ordination and evaluation of peatlands development, land reclamation, cost sharing for agricultural development, and remote sensing.

Numerous referrals, many involving energy development, were handled during the year. Referrals received in 1984-85 involved:

Pipelines	17
Electrical transmission lines	8
Preliminary disclosures	4
East Slopes reclassification	3
Annexations	21
Sanitary landfills	40

Land Classification Branch

In 1984-85, the branch continued its mandate to carry out, supervise and co-ordinate all land irrigability classifications in Alberta.

The revised Land Classification Standards and the new Land Classification Procedures Manual were adopted by the branch at the beginning of 1984. Land irrigability classes and topography ratings were modified.

Approximately 570 classification requests for water rights (Level II) were completed during the year.

Land classification reports for rehabilitation and planning (Level III) were prepared for approximately 142,000 acres in the Eastern Irrigation District (EID). Based on these Level III reports, wetland/salinity maps were prepared for 324,000 acres in the EID. Branch staff also supervised the Level III classification of a further 500,000 acres, which was conducted by the private sector under contract for the Alberta Water Resources Commission.

A Level V land classification was prepared for 228,000 acres of land contained in four blocks.

The soils laboratory, located in Lethbridge, analysed or contracted out more than 32,000 soil samples. Supervision of quality control in contracted private laboratories was a major task for soils laboratory staff during the year.

The branch placed increased emphasis on land classification-related research in 1984-85, conducting studies related to soil classification standards and procedures. In co-operation with the Alberta Research Council and Agriculture Canada, the branch carried out a project which compared, for accuracy and cost effectiveness, the standard approach to Level IV land classification with that of an office review of soil survey information.

During the year, initial data were collected from a project monitoring irrigation of solonetzic soils. This project, funded by the irrigation rehabilitation and expansion program, is designed to determine whether some solonetzic soils can be successfully irrigated on a continuous basis.

Research began on three studies related to the irrigability of coarse-textured soil, shallow bedrock soils and saline soils being reclaimed through canal rehabilitation. Staff of the soils laboratory continued work on improving methods for obtaining soil extracts and saturating soils. Two long-term studies of solonetzic soils under irrigation were terminated.

In 1984-85, the branch became more involved with provincial and federal land resource inventories and evaluations. A report on the agricultural capability of dryland soils was prepared for the Big Lease Area on the Blood Indian Reservation at the request of the Band Council.

A color composite land irrigability ratings map for the Western Irrigation District was produced.

Project Planning Branch

In 1984-85, the project planning branch continued to support the Irrigation Council and the province's irrigation districts by providing technical assistance and advisory services for project evaluation, long range planning and the irrigation rehabilitation and expansion program.

Final reports on general rehabilitation plans were completed for the Lethbridge Northern, Ross Creek and United Irrigation Districts, as well as 19 major block reports for the remaining larger irrigation districts.

Three storage reservoir and six project feasiblity studies were also completed for various irrigation districts. Information regarding identification of irrigable lands and the feasibility of irrigation development was provided to the Water Resources Commission and to river basin planning studies for the Little Bow River and Willow Creek basins.

In support of the South Saskatchewan River Basin Planning Program, the branch monitored public hearings held by the Alberta Water Resources Commission and prepared responses from the department to questions raised during the proceedings.

Priority was given to research and evaluation studies on improvement of seepage control measures, irrigation efficiency, water management and land reclamation through irrigation system rehabilitation and modernization. Topics of study included water conveyance efficiency, deflections in buried irrigation pipelines, physical properties of buried membrane liners, durability of rigid canal liners, flow metering and structure calibration. Electronic datalogging equipment intended to replace Stevens water level recorders was tested, and a study was completed on the feasibility of using a soil-cement-fly-ash mixture to line canals.

On behalf of the Irrigation Council, 69 proposals for irrigation capital works projects were evaluated, and construction of 91 such projects was monitored. The project planning branch also completed approximately 300 right-of-way easements and appraisals for the irrigation districts.

During the year, provision of engineering services continued to be phased out for the small irrigation districts, the Aetna, Leavitt, Magrath, Mountain View, and Ross Creek Irrigation Districts.

Monitoring and evaluation studies were continued which compared the effectiveness of a pressurized pipeline versus concrete-lined canal systems. Exposed lining materials, including reinforced concrete, fabriform chutes, corrugated metal pipes, and buried pipelines, were evaluated to determine their effectiveness and durability under Alberta conditions.

In co-operation with Underwood McLellan Consulting Engineers, the project proposal "Downstream Automatic Control of a Series of Checks on an Irrigation Lateral" was submitted and approved for funding by Farming for the Future.

The air photo data base was corrected and updated with funding provided by the irrigation rehabilitation and expansion program. Computer input was completed for the air photo data management program, and a data bank user's manual was prepared. An extension service,

which offered instruction on how to access and use the aerial photo-data base, was provided to private industry, irrigation districts, and government departments and agencies. Two contracts for contour mapping were completed for the proposed Snake Lake and Rolling Hills Reservoir sites in the Eastern Irrigation District.

In co-operation with Lethbridge Community College and the Alberta Irrigation Projects Association, assistance was provided in the preparation, co-ordination and presentation of a one-week ditchrider training course. A technical conference was also held with managers and engineers of the irrigation districts.

The *Water Haulers Bulletin*, a newsletter presenting research results, information on new materials and construction methods, and other matters of interest to the irrigation industry, continued to be published by the branch and distributed to 350 clients.

Other activities undertaken by the project planning branch in 1984-85 included flow measurements at 35 metering stations; major structure calibration; drafting of land irrigability, salinity, and systems inventory maps and general rehabilitation plans; field surveys for water well, peizometer and centre pivot point locations; and preparation and administration of 20 contract documents and agreements.

IRRIGATION AND CONSERVATION DIVISION

In 1984-85 the irrigation and conservation division continued to concentrate on programs and services aimed at assisting farmers with soil and water conservation. This was consistent with the department's objective of ensuring that Alberta's land, soil and water resources are managed and conserved in the long-term interests of the agricultural industry.

The division's programs were carried out by three branches:

Conservation and development branch — in its first full year of operation, this branch developed, promoted and implemented on-farm soil and water conservation and management technology.

Drainage branch — provided technical expertise in on-farm subsurface drainage, seepage control and groundwater flow analysis.

Irrigation branch — assisted with the development, implementation and maintenance of functional and efficient irrigation systems and the provision of irrigation management technology to producers and suppliers.

During the year the division helped to review and form department responses to recommendations contained in the Environment Council of Alberta (ECA) report *Maintaining and Expanding the Agricultural Land Base in Alberta*. The division also supplied information and recommendations to the Alberta Water Resources Commission for its study of the South Saskatchewan River Basin.

In 1984-85, division staff were involved with several conferences that dealt with soil conservation. On these and other occasions staff reported on the ECA study mentioned previously as well as the *Soil at Risk* report issued by the Senate Standing Committee on Agriculture, Fisheries and Forestry.

The division helped develop a joint-roles protocol agreement between Alberta Agriculture and the Prairie Farm Rehabilitation Administration (PFRA), and in co-operation with agricultural service boards expanded the guidelines for soil and on-farm water conservation programs. Dryland salinity investigation services were also reviewed, and provisions were made to extend this program to a province-wide basis, jointly administered with the PFRA and operated through agricultural service boards.

Abnormally dry conditions throughout much of the province for the second consecutive year stimulated widespread producer interest in irrigation development. In central and northern regions interest also continued to increase in surface drainage and the soil conservation area program (SCAP). The division continued to work during the year with Alberta Environment and a

number of counties and agricultural service boards in developing guidelines for on-farm water management systems.

Demand for and provision of technical assistance to farmers was at a high level in 1984-85. In particular, assessments for irrigation feasibility and system performance, investigations for dryland salinity, and the soil conservation area program showed marked increases. Research and demonstration activities continued at a high level, and included projects which received support from the Farming for the Future research program.

The extreme drought in southern Alberta during the 1984 growing season plainly emphasized the importance of irrigation in this region. The dry weather tested the ability of the irrigation districts to manage and deliver scarce water resources, and gave producers an opportunity to evaluate their system's performance in meeting crop requirements.

In 1984, assessed acreage in the province's 13 irrigation districts increased by 14,364 acres, to give a total of 1,123,793 acres on the rolls. Approximately 1,000,000 acres were actually irrigated during the 1984 season, although 'under-irrigation' was quite frequent due to system and water limitations.

The province's irrigation rehabilitation and expansion program continued to have a substantial impact on the servicing ability of the irrigation districts. This in turn led to further improvements in operation of on-farm irrigation systems. During the year, the Alberta Irrigation Projects Association presented a report which assessed the relative costs and benefits of irrigation rehabilitation investment. The report confirmed that benefits for water users and for the province as a whole have remained unchanged since the inception of the irrigation rehabilitation and expansion program.

Conservation and Development Branch

The conservation and development branch completed its first full year of operation in 1984-85. During the year, the branch pursued its objectives of developing, promoting, and transferring on-farm soil and water conservation and management technology to Alberta's agriculture industry.

Technology transfer was a major focus of branch activities in 1984-85. Staff provided information on soil conservation and farm water management at numerous functions, including meetings held by extension and commodity organizations. Other related activities included publication of factsheets, newsletters, and scientific articles, and preparation of short courses.

Where possible, applied research projects were performed as demonstration projects to facilitate technology transfer. Branch staff also continued to develop, refine, and update computer applications to assist the sector in providing technical services to the agriculture industry.

During the severe drought which struck southern Alberta in 1984, staff of the conservation and development branch chaired the drought monitoring committee formed to keep government and senior officials informed of crop and water supply conditions. This committee also co-ordinated the drought-response activities of several agencies, including Alberta Agriculture, Alberta Environment, and the Prairie Farm Rehabilitation Administration. In addition, the committee assisted in developing a number of drought assistance programs, including the dugout pumping program, the emergency well drilling program and the livestock drought assistance program.

Promoting effective soil management and developing soil conservation awareness programs were major activities for branch staff during the fiscal year. Initiatives included distribution of "dust bucks" and wind erosion posters, and production of the feature films *Gone with the Wind...Too* and *A Matter of Soil*. The latter was honored by the Alberta Motion Picture Industries Association as the best educational film of 1984.

Serious wind erosion occurred in many areas of the province in 1984; in the spring, it was estimated a half-million acres of farmland in region 2 alone were being seriously eroded.

In parts of region 1, erosion continued into the winter of 1984-85 on land left bare by excessive cultivation. In response to this situation, branch staff developed emergency erosion control programs for many municipalities. Activity and enforcement under the Soil Conservation Act were increased, and a project was initiated to monitor and assess emergency erosion controls.

In 1984-85, branch staff continued to assist agricultural service boards by providing technical, design, planning and approval assistance for conservation projects funded under the soil conservation area program (SCAP). More than 250 SCAP project proposals were received by the branch in 1984-85, and 33 municipalities received project grants totalling $235,000 under the program during the year.

Agricultural service board guidelines for conservation and development programs and projects were reviewed and modified by the branch. Guidelines which had previously applied only to SCAP were expanded to encompass nine subjects for possible provincial cost-shared projects in 1985-86. These modifications should permit a more comprehensive approach to conservation and development by local authorities.

The branch also carried out inspections and engineering surveys and provided design and technical assistance to local authorities to facilitate planning of agricultural service board projects. Related activities included development and presentation of training sessions for agricultural fieldmen, promotion and assistance with on-farm demonstrations, and initiation of research and development projects concerning grassed waterways and erosion prevention and control.

During the year, the branch's dryland salinity prevention and control activities underwent extensive review. Alberta Agriculture, Agriculture Canada, the Dryland Salinity Control Association, and agricultural service boards were all participants in the review process.

As a result of this review, new procedures were finalized for the dryland salinity investigation service, which is a joint effort of the conservation and development branch and the Prairie Farm Rehabilitation Administration. Changes included introduction of a $100 user fee, and expansion of the service to central and northern Alberta. Research was also initiated on the economics of dryland forage production, and its effectiveness in controlling salinity.

In the area of agrometeorology, staff placed new emphasis on improving technology transfer and weather services, and initiated proposals for further improving weather services offered to the agricultural community. The branch continued to publish the *AgWx Bulletin*, and conducted a subscriber survey as to ways to improve it. Staff also remained active on several climate-related committees, including the interagency agrometeorology committee and its subcommittees.

In 1984-85, the branch continued to develop a more co-ordinated and comprehensive approach to on-farm water management. Contact with Alberta Environment was improved, and branch resources were reallocated to improve efficiency in this area. Joint programs of the branch and the agricultural service boards were reviewed and modified.

In addition, provincial funding of on-farm water management projects was made possible through a new farmland development and reclamation program. Under this progam, projects involving slough and water consolidation, on-farm channel improvements, and on-farm drainage were made eligible for support. Extension materials depicting various aspects of on-farm water management were produced for distribution in 1985-86.

Development of more complete information regarding conservation and storage of natural precipitation was another major focus of branch activities. Precipitation probability analyses were undertaken for all agricultural soil zones in the province to assist in on-farm water management and fertility planning. Four applied research projects in this area were also initiated.

Water quality was monitored by branch staff in the Verdigris and Etzikom Coulee systems. Findings were presented to interested producer groups, irrigation districts, and other agencies at various meetings during the year.

Applied research remained a branch priority. Staff were involved in more than 40 research, development and demonstration projects throughout the province. Project topics included soil salinity, irrigation water, moisture and on-farm water management, erosion control, and soil conservation. Study topics for dryland crop production included moisture and fertility retention, and elimination of fallow by direct seeding of winter wheat into stubble.

Committee participation and liaison with other departments and agencies were major branch activities in 1984-85. Staff emphasized integration and co-ordination of programs, activities and resource use with Alberta Environment and the Prairie Farm Rehabilitation Administration, and were active participants in various research committees, including the land resources and engineering program committee of Farming for the Future.

Drainage Branch

In 1984-85, the drainage branch continued to develop and extend technical expertise in on-farm subsurface drainage, seepage control, and groundwater flow analysis and control, in order to conserve and reclaim Alberta's soil and water resources.

During the year, the branch placed greater emphasis on subsurface drainage and groundwater programs. As part of this effort, branch staff made presentations at workshops in Barrhead and Grande Prairie, and staged several seminars in southern Alberta. In addition, a major survey of Alberta farmers was initiated to evaluate the use of subsurface drainage for salinity control and wetland reclamation.

Branch staff completed three Farming for the Future projects in the areas of subsurface drainage, wind turbine use and the use of cutoff curtains for canal seepage control. Approval was also received for a three-year Farming for the Future study to evaluate dryland salinity in central Alberta, to be carried out jointly with the irrigation and conservation and development branches.

Among branch research activities conducted during the year were an evaluation of the irrigability of land underlain by shallow bedrock, dryland and irrigated salinity studies in the Horsefly Basin of the St. Mary River Irrigation District, and a major groundwater study in the Milk River Basin to evaluate potential irrigability problems. Other projects included assisting Hardy Associates Ltd. in a Farming for the Future study on canal seepage control, and an evaluation of subsurface drainage for surface water control in the Peace River area.

During the year, the branch became increasingly involved in extension activities. Projects included presentation of a two-week course on subsurface drainage to representatives of provincial, national and international agencies involved in drainage activities; a three-day subsurface drainage course for department staff; a two-day salinity workshop for representatives of all agencies involved in salinity control in Alberta; and hosting a public field-day on the use of small-scale wind turbines for pumping water (the windmill project).

The branch's service programs, which assisted farmers, irrigation districts and government agencies in dealing with soil and groundwater problems, saw a marked increase in activity during the year. Branch staff participated in an interdepartmental drainage committee, which evaluated Alberta's drainage potential, and completed a major groundwater study for the Lethbridge Northern Irrigation District, which investigated possible salinity problems that might result from proposed irrigation expansion. In addition, staff consulted with representatives of Texaco Canada regarding reclamation of lands damaged by salt spills near Calmar.

Service activities also included assisting Ducks Unlimited with evaluation of potential wetland habitat areas. Through membership in the advisory committee, and through the branch's ongoing salinity and groundwater investigations, branch staff were involved with rehabilitation of the main canal of the St. Mary River Irrigation District.

Irrigation Branch

In 1984-85, the irrigation branch continued to assist farmers and various agencies in developing and managing soil and water resources to improve the efficiency and productivity of irrigated agriculture.

The exceptional dryness of the growing season had a significant impact on the operation of the branch's programs during the year. A greater than average number of requests were received and responded to by branch staff concerning the adequacy of installed irrigation systems and their operation to provide for judicious water management.

The 1984 drought also resulted in heightened interest among the farming community in the acquisition of water licensing and rights for non-irrigated land. However, the early onset of winter resulted in the postponement of many projects involving branch staff.

With the exception of the agricultural feasibility and planning program, branch programs generally dealt with slightly fewer clients than in the previous year. In total, branch specialists responded to more than 6,400 individual requests for advice and assistance, through office and farm calls, and field investigations. The latter were conducted regarding sprinkler systems, land

forming, surface and sub-surface drainage, and irrigation feasibility and management.

Overall, some 240 design plans were prepared, 386 surveys conducted, and 85 extension meetings held in 1984-85. In addition, 158 individuals participated in the irrigation management program, which encompassed nearly 40,000 cropped acres.

Despite the tight cost-return ratios experienced in the agriculture industry during the year, in 1984-85 farmers continued to procure and erect irrigation equipment, with assistance from branch staff where required. Land levelling for gravity systems continued at a normal rate until the onset of winter weather. During the year staff provided advice regarding effective use of farm irrigation systems, and performed numerous irrigation pump tests and developed designs for renozzling centre pivot systems.

Demand for assistance in the area of on-farm drainage development and planning dropped by approximately 20 per cent from the previous season, probably as a result of lower water tables due to high vegetation evapotranspiration rates. In areas with persistently poor drainage and severe salinization, staff conducted intensive investigations and monitoring.

The 1984 growing season saw a marked increase in demand for assistance under the feasibility and planning program. An unprecedented number of requests was received, and investigations carried out, for agricultural feasibility reports in the water licensing process. In total, demand increased 45 per cent over the previous maximum experienced in 1983-84.

Branch staff closely followed the Alberta Water Resources Commission public hearings regarding the South Saskatchewan River Basin, and provided a submission on behalf of the department.

The number of formal participants in the irrigation management advisory program - those taking a three-year training course in this area - declined approximately 10 per cent in 1984-85. This decrease reflected a shift in the program's focus from service to training. This transition was also evident in the number of hours worked on the program, which increased in spite of the smaller number of participants.

The informal component of the advisory program, which dealt with spontaneous demands for advice on water management, saw a 40 per cent increase in activity during the season.

During staff presentations at extension functions, particular emphasis was placed on the economics of irrigation and the management of irrigation systems under conditions of reduced supply.

In general, extension activities in 1984-85 focussed on irrigation system design and operation, with instruction provided through short courses, seminars, field days and media releases. Branch staff also met with individual producers, agencies and producer organizations to discuss irrigation planning, management and production. Staff continued to co-host the television program 'Agri-Vision', which was broadcast in southern Alberta's irrigated and general agricultural areas.

IRRIGATION BRANCH 1978-85 COMPARATIVE STATISTICS

	78-79	79-80	80-81	81-82	82-83	83-84	84-85
Acres of land levelled	3,366	3,785	4,516	3,175	3,262	3,513	1,992
Sprinkler systems investigated	418	573	406	420	560	640	721
Water license feasibility reports	112	117	87	112	99	142	133
Irrigation management participants	140	160	185	220	213	181	158
Subsurface drainage investigations	—	—	39	29	32	161	103
Powerline relocation grant applications	—	—	19	18	17	24	10
Pump tests	—	—	—	45	41	42	60

IRRIGATION SECRETARIAT

The legislative authority for the Irrigation Council and the irrigation secretariat is the Irrigation Act, which states in part that "There shall be an Irrigation Council consisting of not less than seven members appointed during pleasure by the Lieutenant-Governor in Council", and that "There shall be an Irrigation Secretariat consisting of one or more employees of the Department of Agriculture designated by the Minister. The Irrigation Secretariat is responsible to the Council and shall carry out its functions and duties under the direction and supervision of the Council."

The objectives of the Irrigation Council were to effect a sound irrigation policy for the province and to act as an advisory body on irrigation to the Minister of Agriculture. Duties as outlined in the Irrigation Act included approval of additions or deletions of land to or from irrigation districts; approval of money by-laws, district rates, and budgets; and administration and approval of any expenditure made by an irrigation district to finance the rehabilitation of its works under a cost-sharing agreement with the Province of Alberta.

1984-85 was the fifth year of the province's irrigation rehabilitation and expansion program. The objectives of the program were to assure irrigation users an efficient, adequate and reliable water supply, to expand irrigated acreage where water supplies permitted, and to reclaim land damaged as a result of seepage.

During the year, the council administered cost-sharing agreements with the 13 irrigation districts. These required a total expenditure of $24,800,000 from the Alberta Heritage Savings Trust Fund, a sum which represented 86 per cent of the aggregate cost of the program in 1984-85. The remaining 14 per cent was provided by the districts. In addition, the council approved 58 project proposals submitted under the cost-sharing agreements. These proposals had a total estimated construction value of $43,766,000.

In October 1984, a five-year, $150-million extension was announced to the irrigation rehabilitation and expansion program, which was to have expired at the end of April 1985. Under the new mandate, the program will continue to rehabilitate and modernize irrigation distribution systems in Alberta.

In addition to its other duties, in 1984-85 the Irrigation Council continued to serve as the irrigation program committee for the Agricultural Research Council of Alberta. In this capacity, the Irrigation Council recommended four research project proposals for funding under the Farming for the Future agricultural research program in 1985-86.

In 1984-85, the Irrigation Council also approved expenditures of $65,000 under the irrigation rehabilitation and expansion research program. These funds were used to support a shallow bedrock study, a land reclamation study, and projects involving monitoring of solonetzic soils. It was anticipated the results of this work would provide data for verification or modification of the province's Land Classification Standards. Financial assistance totalling $130,000 was also approved for the aerial photography program.

During the year, the council approved the addition of 4,431 acres to Alberta's irrigation district rolls.

The Irrigation Council held 16 meetings during 1984-85. These included four research meetings, and a special meeting in which the council recommended to the Minister of Agriculture methods for distributing and allocating funds under the extended irrigation rehabilitation program.

In addition, council members toured 11 of the province's irrigation districts. On these tours, the council held meetings with the respective boards of directors of the districts to discuss matters of mutual concern.

A special meeting with the Minister of Agriculture and the Alberta Irrigation Projects Association was also held during the year, to discuss a report published by the association regarding the economic benefits of irrigation rehabilitation. The report confirmed that benefits for water users and for the province as a whole have remained unchanged since the inception of the irrigation rehabilitation and expansion program.

APPENDIX

Acts Administered by Alberta Agriculture

Agricultural Development Act
Agricultural Pests Act
Agricultural Service Board Act
Agricultural Societies Act
Agrologists Act
Alberta Agricultural Research Trust Act
Animal Protection Act
Artificial Insemination of Domestic Animals Act
Bee Act
Beet Lien Act
Brand Act
Crop Liens Priorities Act
Crop Payments Act
Crop Payments (Irrigated Land Sales) Act
Dairy Board Act
Dairy Industry Act
Department of Agriculture Act
Farm Implement Act
Federal-Provincial Farm Assistance Act
Feeder Associations Guarantee Act
Fur Farms Act
Grain Buyers Licensing Act
Grain Charges Limitation Act
Hail and Crop Insurance Act
Harvesting Liens Act
Horned Cattle Purchases Act
Irrigation Act
Irrigation Land Manager Act
Line Fence Act
Livery Stable Keepers Act
Livestock Brand Inspection Act
Livestock Diseases Act
Livestock Injury Act
Livestock and Livestock Products Act
Margarine Act
Marketing of Agricultural Products Act
Meat Inspection Act
Seed-control Areas Act
Seed Dealers Act
Seed Grain Purchase Act
Soil Conservation Act
Stray Animals Act
Surface Rights Act
Threshers' Lien Act
Vegetable Sales (Alberta) Act
Veterinary Surgeons Act
Weed Control Act
Wheat Board Money Trust Act

ALBERTA LEGISLATURE

OFFICE OF THE AUDITOR GENERAL

AUDITOR'S REPORT

To the Minister of Agriculture

I have examined the balance sheet of the Wheat Board Money Trust Account as at March 31, 1985 and the statement of revenue, expenditure and unexpended funds for the year then ended. My examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as I considered necessary in the circumstances.

In my opinion, these financial statements present fairly the financial position of the Trust Account as at March 31, 1985 and the results of its operations for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

F.C.A.
Auditor General

Edmonton, Alberta
July 23, 1985

WHEAT BOARD MONEY TRUST ACCOUNT

The Board of Trustees met on November 8th 1984 and awarded scholarships and bursaries as follows:

Fairview College, Fairview	$2400.00
Lakeland College, Vermilion	$2400.00
Olds College, Olds	$2400.00
Lethbridge Community College, Lethbridge	$2400.00
Provincial 4-H Council	$2800.00
Total	$12,400.00

Recipients of individual awards were determined by each college and 4-H Council based on criteria which includes pursuit of agricultural studies.

Balance Sheet as at March 31, 1985

	1985	1984
ASSETS		
Deposits in trust (Note 2)	$ 74,324	$ 75,007
Accrued interest	1,424	1,425
Investments (Note 3)	52,981	52,977
	$128,729	$129,409
LIABILITIES AND UNEXPENDED FUNDS		
Accounts payable	$	$ 110
Unexpended funds, Statement B	128,729	129,299
	$128,729	$129,409

Statement of Revenue, Expenditure and Unexpended Funds for the Year Ended March 31, 1985

	1985	1984
REVENUE		
Interest and amortization of discounts	$ 11,830	$ 11,000
EXPENDITURE		
Scholarships and bursaries	12,400	12,400
Travel	-	110
	12,400	12,510
Excess of expenditure over revenue	570	1,510
Unexpended funds at beginning of year	129,299	130,809
	$128,729	$129,299

Notes to the Financial Statements as at March 31, 1985

Note 1 **Authority**
The Wheat Board Money Trust Account operates under the authority of the Wheat Board Money Trust Act, Chapter W-7, Revised Statutes of Alberta 1980.

Note 2 **Deposits in Trust**
Deposits in trust consist of deposits in the Consolidated Cash Investment Trust Fund of the Province of Alberta.

Note 3 **Investments**
Investments consist of the following:

	1985		1984	
	Amortized Cost	Market Value	Amortized Cost	Market Value
Debentures:				
Provincial issues, direct and guaranteed	$52,981	$39,146	$52,977	$36,464

Note 4 **Changes in Financial Position**
A statement of changes in financial position is not provided as disclosure in these financial statements is considered to be adequate.

Note 5 **Approval of Financial Statements**
These financial statements were approved by management.